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THE SPECIALIST: WHAT SHALL WE DO WITH HIM?

S. S. GOLDWATER, M.D.
Director, Mount Sinai Hospital
NEW YORK

The specialist is at once the hope and the despair of modern medicine. That he has contributed much to medical progress is generally acknowledged, and there is at least a reasonable probability that his scientific contributions will continue. Let us hope, at all events, that they will.

In everyday practice, the specialist's knowledge is often indispensable to a correct understanding of obscure diseases, his skill a necessary means to the restoration of bodily function or the saving of life. His successes, often impressively dramatic and hence widely advertised, have won for him an astonishing influence. Strange diseases are made fashionable by his simple ukase, only to be banished from society when new favorites win his approval. The specialist is the prop of debilitated men, the idol of neurotic women, the restorer of undernourished children. He is admired for his industry, and is sometimes envied for his wealth. But with every increase in his activities, he tends to become more and more absorbed in detail, and finds it increasingly difficult to see his patient whole. The most highly successful medical specialists often lead a life of professional isolation, the consequences of which are in some respects deplorable; for, living and laboring somewhat apart, little by little the specialist acquires the habit of exaggerating the significance of symptoms which are most familiar to him and of overestimating the importance of the forms of treatment in which he is most skilful. In the course of time, his diagnostic judgment is apt to be impaired; eventually it becomes suspect even when, in an individual case, it may be perfectly sound.

An expanded blind-spot is not peculiar to the specialist in medicine; it would be unjust to ascribe to these distinguished members of the medical profession mental obliquity of an unusual kind. A naval officer calmly assures us that the construction of three additional cruisers is all that is required to prevent another war; this is the naval specialist's naive interpretation of the forces at play in the world's affairs. An English writer testifies that the intelligentsia of his country, who pride themselves on their knowledge of the latest novel, the latest poem, the latest picture, lack even the remotest interest in science. The most that can be expected of science, declares an Italian essayist, who looks on material progress as hopelessly vulgar and unworthy the attention of an intellectual aristocracy, is a more commodious water-closet or a less strident "loud speaker" for the parlor radio. Evidently scientists and clinicians are not the only specialists whose mentality is curiously circumscribed.

As I reflect on the psychologic peculiarities of the specialist in medicine, a dozen characteristic incidents, each revealing a more or less twisted mental horizon, press forward from a crowded memory; but I refrain from going into the details of actual cases, because I am sure that it is unnecessary to do so; any physician of experience, or, for that matter, any layman who has had frequent contact with physicians, can readily furnish examples of his own. Virginia Woolf's picture of a Harley Street alienist, in "Mrs. Dalloway," is a trifle overdrawn, but she speaks for many intelligent laymen when she observes that "if a doctor loses his sense of proportion, as a doctor he fails."

Many charges besides that of distorted vision have been brought against the medical specialist. Critics say that he has caused to be thrust aside the old-fashioned family practitioner, for whose wise and kindly ministrations he has provided no adequate substitute; that he has increased inordinately the cost of medical treatment, making it a forbidding specter to be avoided or a painful burden to be borne by persons of moderate means; that he has lessened the effectiveness (or at least added to the difficulties) of undergraduate medical education by causing the curriculum to become crowded and confused; that he is directly or indirectly responsible for the creation of many of the harmful medical cults which flourish in the land, building false hopes on the quicksands of pseudoscience.

But, as a hospital administrator, what troubles me most is the fact that specialism, which in its proper sphere has served and continues to serve a highly useful purpose, has split the forces of medicine into numerous small bodies which, valuable as they may be for skirmishing purposes and in certain critical emergencies, are powerless to act as an effective unit in the endless struggle against disease. This distressing fact prompts the question whether anything can be done by means of hospital organization to promote the training of specialists under conditions that will conserve and develop in them what is soundest and most useful, while checking the growth of eccentricities which arise out of their professional isolation. It is not sufficient that these scintillating stars adorn the medical heaven; they should also illuminate it.

I take it to be the duty of medical administration to facilitate the utilization of the potential resources of modern medicine in dealing with the needs of the individual patient. To accomplish this object, hospital organization must encourage the growth of specialization to a point at which its effective coordination with general medicine can be maintained; to pass beyond this point is to rob the patient of the desirable fruits

of scientific and technical progress. The most important of the available instrumentalities in the attempt to "cash in" on medicine are certain types of hospitals —large, small, general and special. Certainly, hospitals have a potential usefulness infinitely greater than that of the scattered organizations of various kinds which through group diagnostic practice are making a logical but not an entirely successful or sufficiently far-reaching attack on this problem. Let us therefore inquire whether our aim can be most readily achieved in small hospitals, in larger general hospitals, in scattered special hospitals, or in assemblages of special hospitals popularly called medical centers.

As a first step toward hospital organization in a community of small size and of limited financial resources, the small hospital is a useful and highly commendable social agency, which it is far from my purpose to disparage. A pronounced advantage of the small hospital is the ease with which it can maintain a pleasant homelike atmosphere, the lack of which does not add to the charms of its bigger sister institutions. On the other hand, the small general hospital is distinctly handicapped by its inability to maintain, on a sound economic basis, a laboratory organization of high grade for purposes of diagnosis and research. Of paramount importance to the present discussion is the impracticability of including within the contracted framework of a small hospital specialized departments of sufficient capacity to satisfy the legitimate needs of first-rate specialists. For his proper use and development the specialist requires a distinctive department in which studies of groups of patients can be made, in which new methods of treatment can be investigated under proper control, and in which medical graduates of promise can be trained to become the specialists of the future, and these facilities the small general hospital cannot supply.

The hospital which is devoted to the practice of a single highly specialized branch of medicine or surgery likewise suffers from pronounced limitations. Unlike the small general hospital, its selected clinical material is ample for its chosen purpose; but the special hospital resembles the small general hospital in being, as a rule, incapable (exceptions must, of course, be recognized) of maintaining a complete laboratory staff of the highest quality; while in its peculiar self-created environment, in which it is divorced from steadying contact with other medical branches, the classic evils of specialization are bred. How many busy specialists are capable of taking a thorough clinical history, or of making a satisfactory and complete physical examination? How many specialists are there who even claim to be able to do so? If it is true that the general practitioner needs the stimulation, advice and technical service of the specialist, and that the latter is therefore an indispensable part of an efficient general hospital organization, it is equally true that the specialist needs constant contact with physicians whose attention is not fastened unremittingly on certain regions of the body, on certain bodily functions, or on the use and development of elaborate technical procedures which have only a limited application; and those who know the actual routine of special hospitals must admit that the distinguished "consulting physician" whose name is conspicuously displayed in the hospital catalogue does not often render, and indeed is scarcely in a position to render, the necessary routine auxiliary clinical service.

How, then, can the limitations of the small general hospital, and likewise the hazardous isolation of the specialized hospital, be overcome? How can medicine be made to go steadily forward on an even keel? Two methods suggest themselves.

One method, which has received a great deal of publicity of late, is to bring together in a single locality a large number of highly developed specialized institutions, each of considerable size; this is the so-called medical center. Another is to find a place for recognized medical and surgical specialties within the framework of a general hospital just large enough to accommodate all the clinical branches that have earned the right to recognition, but no larger. Each of these methods claims authoritative support. Let us compare the relative merits of the two systems.

In the general hospital of suitable size, say a hospital of about 500 or even 600 classified beds (in this figure unclassified private rooms are not included), there is or can be provided for each of the various medical and surgical specialties a sufficient number of beds to afford to each specialist that volume of clinical material which is necessary for group study, for related laboratory research, and for specialized medical training. If the total number of beds is increased to two or three thousand (even five thousand has been proposed) the inevitable result is to change interrelated departments into mammoth specialized institutions, whose heads cannot easily avoid becoming absorbed in time-consuming administrative problems and distracting duties that lead away from the actual practice of clinical and scientific medicine—problems and duties that are the bane of the existence of clinicians in the larger teaching institutions. This is the testimony, in and out of print, of many who are being ground in the insatiable mill of modern medical school organization. In the properly proportioned general hospital these handicaps are avoided by restricting the size of each special department.

While there are certain advantages in bringing a number of highly specialized institutions, each of large size, into the same neighborhood, the practicability of actual clinical cooperation between the heads of such institutions in the treatment of an individual patient is far less than in the case of a general hospital of moderate size in which the very nature of the construction and arrangement of the buildings brings into intimate daily contact the men who head the several departmental services, to each of whom there is reserved sufficient time for the desired servicee. Two of the ablest otologists in the country have told me that although they had served for years as consultants to general hospitals and as attending otologists to ear and throat hospitals, they did not really understand the true relations of their specialty to general medicine until they became attending otologists to a general hospital under conditions which brought them into intimate daily contact with fellow practitioners in other fields, and which revealed to them, in the general medical and surgical wards, aspects of otology which the clinical material of the special hospital did not and could not present.

Briefly, then, modern medicine can be practiced most effectually in a general hospital which, on the one hand, should not be too small to accommodate the various specialties, but which, on the other, should not be so large as to use up the time and strength of the specialist, either in an unwieldy chemical service or in administrative problems, or to necessitate the awkward physical separation of clinical departments from each other, thus making intimate cooperation impossible, and, indeed,

making any cooperation whatever workable only through the use of cumbersome administrative machinery. I question whether so-called medical centers, which are springing up all over the country, do not by their stupendous size and the very terms of their organization, which includes many excessively developed clinical departments, tend to perpetuate rather than relieve or abolish the faults of specialization. It is an old saying, attributed to the Zend Avesta, that "a man who makes two blades of grass grow where one grew before has done more to win salvation than he who utters ten thousand prayers." Joining a medical center is perhaps the only gesture possible to an existing special hospital that is conscious of its shortcomings and is honestly seeking scientific salvation, but I see in it little more than a pious wish, an act of faith, a prayer for earnestly desired better things; healthy new blades of grass, to enrich and beautify the garden of medicine, are far more likely to spring from the fertile soil of the general hospital.

At this point, a friendly critic, who believes that I am stressing somewhat too sharply the obstacles to the clinical cooperation of clusters of allied hospitals, remarks that while it may be true that the chiefs of such institutions will be too preoccupied to participate regularly in miscellaneous bedside consultations, there is no reason why subordinate staff members should not be numerous enough to provide as many consultations as the several services may require; to which I reply that a clinical service takes its orders and its characteristic tone from its chief, and that the extramural clinical contacts of juniors will not readily correct the myopia of their masters.

It is not only the internal defects of the medical center (defined as a group of special hospitals) that disturb me, but the indirect effect of this type of hospital organization and grouping on other institutions; for the encouragement of large special hospitals prevents the development of properly proportioned special departments in numerous general hospitals, and thus works double injury on both physician and patient. Few general hospitals have been so fortunate as my own in rounding out their clinical organizations in good season.

Naturally, the bigness of medical centers appeals to local pride. The newspapers of the metropolis of the West tell us with evident satisfaction that it will soon have a medical center which will exceed in size any medical center in the East. Such an announcement gratifies those who regard bigness as the supreme virtue; a numerous company, members of which, oddly enough, are encountered almost as frequently within the classic precincts of the university as among the unsophisticated whom one expects to meet in the bland open spaces of Main Street.

It is not difficult to understand the sense of relief that comes to the distracted dean of a medical school, as he contemplates the proposed assemblage of a group of special hospitals containing a vast aggregation of clinical material in the immediate neighborhood of his school, whose students formerly were obliged to travel all over town for clinical instruction which it was always difficult to arrange, and still more difficult to control; but much more than the comfort of the dean or the convenience of the undergraduate student is at stake, for unless medical practitioners are brought into right relations with one another through efficient hospital organization, patients will be deprived of the full benefits to which they are entitled and, if the practitioners are teachers of clinical medicine, students will be exposed to harmful influences. As I see it, the real remedy, which is not beyond reach, lies in the orderly development of properly balanced general hospitals in all parts of the country. It is fortunate that the distribution of the population favors this form of development, and that outside the very largest cities, or apart from a few artificially fed state university medical centers whose achievements, under difficult conditions, command respect, the development of large special hospitals, singly or in groups, is almost impossible.

The remedy proposed must, however, be applied with intelligent purpose. It will not suffice merely to establish numerous general hospitals of the type here advocated, leaving the rest to chance; for while some specialists achieve, quite spontaneously, a just appreciation of the blessings of clinical cooperation, others need to have an understanding of these blessings thrust on them. General hospitals must, therefore, be created and fostered with the clear intention of using them as a means of coordinating and unifying medical practice; the daily routine of the hospital must be organized and directed to this end. Like the states of the Union, the medical specialties have certain inherent rights, and these the general hospital must recognize and respect; but active interdepartmental traffic is as vital to the welfare of the patient, as interstate commerce is essential to the prosperity of the nation, and persistent encouragement of this traffic should be the keynote of hospital policy. Herein lies sanity for medicine and safety for the multitudinous sick.

Fifth Avenue and One Hundredth Street.

HISTORY TAKING IN BRONCHIAL ASTHMA*

GRAFTON TYLER BROWN, M.D.
WASHINGTON, D. C.

Bronchial asthma may be due to many different causes and an exhaustive history is of fundamental importance in the specific diagnosis of this disease. I will endeavor to outline the method of taking such a history, indicating, as I go along, the significance of the various factors.

AGE

The first point to be considered is that of age, although the actual age of the patient is nothing like as important as the age of onset of the asthma. Naturally, the prognosis is not as good in an asthmatic patient past middle life as it is in a younger one, as in the older patient there is much more likelihood of organic changes in the lungs and heart, such as emphysema, bronchiectasis and myocarditis. The age of onset, on the other hand, is of importance in that the earlier in life the asthma starts, the more likely it is to be due to sensitization. This is just what we would expect, as it seems much more likely that a patient would become sensitive to some foreign substance when he first eats it or comes in contact with it, than that he would become sensitized to it after many years of exposure. This is particularly true of food sensitization. Animal epidermal and pollen sensitiveness also

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almost invariably begin before the age of 40. Asthma starting after the age of 40 is usually due to bacteria.

OCCUPATION

It is quite important to ascertain the occupation of the patient, as herein may lie the entire cause of his asthma. In bakers, for example, we are suspicious of wheat flour as the cause of the trouble; in grooms, we think of horse dander; in dairymen, cattle hair; in farmers, any of the farm animals; in druggists, powdered drugs, such as ipecac. It is important also to determine the occupation of other members of the household with whom the patient comes in contact. For example, a veterinarian or a laboratory man working with animals may bring home on his clothing and hair sufficient of the animal epidermal emanation to cause asthma in a highly sensitive individual.

FAMILY HISTORY

The tendency to develop sensitization to some foreign substance is inherited in about half of the cases. A history, therefore, of asthma, hay-fever, hives or eczema in the antecedents is suggestive of sensitization.

PAST HISTORY

When the patient has been troubled with hay-fever, hives or eczema, in addition to asthma, it definitely increases the likelihood of sensitization. Eczema in infancy or childhood followed by asthma is very suggestive of food sensitization.

SEASONS

Perennial or nonseasonal asthma may be due to sensitization to foods, animal epidermals, bacteria or miscellaneous inhalants, such as orris root or pyrethrum. Perennial asthma is also occasionally due to pollen sensitization, but as a rule these cases are worse during the pollen season. Seasonal asthma, on the other hand, is generally due to pollen sensitization. In this part of the country, those cases occurring in the early spring are usually due to tree pollens, those in the late spring and summer to pollens of the various grasses and plantain, and those in the fall to the ragweeds. Seasonal asthma is also occasionally due to bacteria. Seasonal bacterial asthma is frequently limited to the winter months, but also commonly occurs during the changeable weather of early spring and late fall. One differential point between the spring and the fall seasonal bacterial cases and pollen asthma is that the bacterial cases are more irregular in their time of starting and stopping than the pollen sensitive cases. Seasonal asthma may also be occasionally due to sensitiveness to some seasonal food. In patients sensitive to the animal epidermals, the time at which they have asthma may coincide with the molting season of animals to which they are exposed.

CLIMATE

Asthmatic patients quite frequently give the history of having asthma more or less constantly in one place, and on going to another locality to live or visit, become suddenly free from asthma, but on coming back to their original residence promptly have it again. This is generally attributed to the beneficent influence of climate. With the exception of bacterial asthma, however, climate has little, if anything, to do with it. Bacterial asthmatic patients are occasionally relieved by moving to a more favorable climate, as a result of the beneficial effect on the underlying bronchitis. As proof that change of climate has nothing whatever to do with the spectacular relief obtained by some asthmatic patients on going to another locality, it may be stated that they can usually obtain the same amount of relief by going to a hospital or hotel near their home, with identical climatic conditions. The explanation lies in sensitization to some substance in the patients' environment, most commonly some pet or domestic animal, which they get away from on leaving home.

SKIN TESTS

I am absolutely opposed to the policy of testing every patient with every allergic substance on hand. What tests to make and what tests not to make should be decided entirely by the history of the individual case. Every substance to which the slightest suspicion can be obtained from the history should, of course, be tested. In addition to this, patients whose asthma began before the age of 40 should be tested with all the substances they eat or come in contact with at least once a week during the period of the year in which they have asthma. If a patient is found to be definitely sensitive to some foreign substance, the interval of contact in selecting the substances to be tested may be widened out to once a month, as a person who is sensitive to one substance is quite likely to be sensitive to others, especially those closely related. On the other hand, in patients whose asthma has its onset after the age of 40, it is usually sufficient to test with the foods and other substances that they eat or come in contact with every day during the period of the year in which they have asthma.

FOODS

It is important to ascertain whether the patient has ever eaten anything at any time in his life that seemed to aggravate his asthma, or disagree in any way. Foods to which individuals are sensitized may produce symptoms from contact with any part of the alimentary tract from the mouth to the anus, as follows: swelling of the lips, swelling of the tongue, breaking out of the mouth, expectoration, itching or constriction of the throat, indigestion, nausea, vomiting, pain in the stomach or intestines, diarrhea, pruritus ani. Itching or breaking out of the skin following the ingestion of some particular food is very suggestive of sensitization to that article of diet. Symptoms of irritation of the eyes and nose may also be due to food sensitization, occasionally by ingestion, but much more frequently by local contact with some powdered food substance, such as wheat flour. This is a fairly common form of sensitization in bakers, or housewives who do their own baking. Many patients believe that they cannot eat certain foods merely because some physician or friend has told them that they should not. The patient's own experience is usually more reliable. With reference to foods, it is important to remember that it is only the protein in the food that can cause sensitization. Carbohydrates and fats probably have no bearing other than that, if taken in excess, they may produce a digestive disturbance and thus permit protein to be absorbed undigested. In inquiring as to the foods entering regularly into the patient's diet, it is important to remember that some of the staple articles, such as egg, milk, and wheat flour, are encountered in innumerable ways. For example, a patient may state that he never eats eggs, but he is undoubtedly getting egg in other foods.

Egg is used in cakes, custards, puddings, graham crackers, cornbread, mayonnaise dressing, sea foam and other candies, glazing on pastries, most baking powders, and the like. Wheat flour, in addition to being in all cakes and pastries and numerous cereals, is used in practically all breadstuffs and as a thickening for soups and gravies. Buckwheat is used at times as a filler in pepper. Sweet potato is used in the glue on postage stamps. Garlic is usually employed to season smoked sausage. Cottonseed oil is present as a substitute for olive oil in bought mayonnaise dressing and in some lard substitutes. It is also used at times in the preparation of synthetic gin. These few examples show how careful one must be in ascertaining all the articles entering into a patient's diet.

ANIMAL EPIDERMALS

It is extremely important to inquire as to what animals are about the home or place of occupation. The patient should be asked whether he has ever noticed that contact with animals, such as petting a cat or a dog, riding horseback or in a horse-drawn vehicle, going in or near a stable, currying a horse, going to a horse show or horse races, milking a cow, or going to the circus or the theater where there are animal acts, causes any symptoms of irritation of the eyes or nose, or aggravation of the asthma. In addition to actual contact with animals, careful inquiry should be made as to which of the animal epidermals, such as feathers, hair or wool, are present in the patient's environment. For example, chicken, duck or goose feathers may be used in bed and sofa pillows, mattresses and down comforts. Horsehair may be used in hair mattresses and pillows, in overstuffed furniture, as upholstery, and as padding in clothing. Cattle hair also is used in some hair mattresses. Goat hair is used occasionally as stuffing for mattresses, especially those brought over by emigrants from Europe. It is also present at times in automobile upholstery, and in the form of mohair in upholstery, draperies and clothing. Hog hair is found in automobile cushions. Cat hair and rabbit hair are found in cheap dyed furs, especially as collars on the cheaper grade cloth coats. Rabbit hair is also found in cheap mattresses and pillows, in felt hats and in children's toys. Sheep wool is found in blankets, comforts, mattresses, rugs and clothing. Camels' hair is found in antique overstuffed furniture, and in coats, hats and scarfs.

BACTERIA

Bacterial asthma is commonly spoken of as nonsensitive asthma or asthmatic bronchitis to distinguish it from the true sensitive or allergic asthma due to foods, animal epidermals and pollens. There are certain points in the history which aid in differentiating the two. When there is itching of the eyes, the case is not likely to be a bacterial one, as definite itching of the eyes is very suggestive of sensitization, in fact is almost always present where sensitization exists to some air-borne substance. The nasal secretion in bacterial cases is likely to be thick, sticky, and frequently yellowish, in contrast to the thin, clear, watery secretion of the sensitive cases, although there may be a thin, watery secretion with a streptococcus infection. Likewise, the sputum in the bacterial case is more likely to be of a greenish-yellow, purulent nature than the grayish-white, jelly-like sputum of the sensitive asthmatic patient. The bacterial asthmatic patient usually has a great deal more cough and expectoration than the sensitive individual. In the bacterial type, as a general rule, cough initiates the attack, whereas, in the sensitive type, shortness of breath and wheezing are the first symptoms noted, and cough does not usually occur until the attack is breaking up. Between attacks, the bacterial asthmatic patient frequently has more or less cough and expectoration, whereas the sensitive asthmatic patient is usually free of these symptoms. In bacterial asthma the most common time for the attacks to begin is in the early morning hours, whereas in sensitive asthma the attacks come on at any time, out of a clear sky, dependent, of course, on ingestion of some offending substance or exposure to it. Sensitive asthmatic attacks are usually more abrupt in their onset than the bacterial type. Bacterial asthmatic patients are usually more susceptible to sudden changes in the weather than sensitive patients. Bacterial asthmatic patients are also more subject to "colds," sinus trouble, and the like, than the sensitive patients. Bacterial patients will commonly give the history that they never have asthma except when they take "cold." The sensitive asthmatic patient also occasionally gives this history, when in reality the attacks are not due to taking "cold" at all, as the symptoms simulating a "cold," such as sneezing, running of the nose and watering of the eyes, are merely reactions of the mucous membranes to some offending substance. These sensitive cases may usually be differentiated from the bacterial ones, however, by the fact that in the former the apparent "cold" and asthma may all develop within a few hours, whereas in the latter it usually requires several days for a head "cold" to get down in the bronchial tubes and produce asthma. Bacterial asthmatic patients are much more likely to have fever with their attacks than are those whose asthma is due to sensitization to foods, animal epidermals or pollens, who usually have a subnormal temperature.

POLLENS

Inquiry should be made of every patient with asthma as to whether trees, plants, flowers or weeds, such as grass, hay, roses, goldenrod or ragweed seem to bother him in any way, especially if the attacks are limited to or worse during the pollen seasons, spring, summer or fall. Pollen asthmatic patients usually give a history of having had typical seasonal hay-fever one or more years before the onset of the asthma. Seasonal pollen asthmatic patients usually have hay-fever for a period of from several days to a couple of weeks each season before the asthma sets in. The symptoms of hay-fever are, briefly, itching, burning, redness and watering of the eyes; irritation, sneezing and running of the nose, alternating at times with complete stoppage of the nostrils because of swelling of the mucous membrane; itching deep in the ears and back in the roof of the mouth; a feeling of fulness in the head; and general prostration. These symptoms would be the same, however, whether due to pollen or to any other air-borne substance, such as the animal epidermals or orris root.

Seasonal pollen asthmatic patients give a history of attacks recurring annually coincident with the period of pollination of some of the anemophilous trees, grasses or weeds. A knowledge of the pollinating period of the various wind-pollinated plants in any particular locality is therefore essential. For example, in the District of Columbia and vicinity, the various

trees pollinate from the latter part of February until about the middle of May, the important grasses successively from about May 10 until the 4th or middle of July, English plantain starting about the same time as the grasses and continuing until about the 1st of August, giant ragweed from about August 10 until September 15 or 20, and short ragweed from about August 17 to 19 until frost, which usually occurs the first part of October. In seasonal asthma occurring during spring, summer or fall, other points in the history that would suggest pollen sensitization would be: symptoms worse on dry, sunny, dusty days than they are on damp, wet, rainy days (rain tending to wash the pollen from the air); worse in the early morning hours, as a result of the greater amount of pollen in the air at this time; worse in the country than in the city; definite aggravation of symptoms from an automobile ride or a train trip; relative or complete freedom at the seashore except when there is a land breeze; complete freedom for the autumnal cases in Europe where there is no ragweed.

MISCELLANEOUS INHALANTS

Under miscellaneous inhalants as a cause of asthma, orris root easily takes first place, because of its extensive use in face, talcum and tooth powders, sachets, and dry shampoos. Every patient with asthma should be questioned, therefore, as to whether contact with these articles causes symptoms of irritation of the eyes or nose, or aggravation of asthma. Asthmatic patients sensitive to orris root frequently give the history of being made definitely worse by crowded places, such as theaters, ballrooms, and street cars. This is due to the large amount of orris root present in the air of such places. Careful inquiry should be made of every asthmatic patient as to whether contact with house dust or any other substance in a powdered form seems to aggravate his trouble. Of course, dust is more or less irritating to every one, but the symptoms resulting from sensitization are very different from those of mere mechanical irritation of the mucous membranes. Pyrethrum is a common ingredient of insect powders and is occasionally a cause of asthma. Sensitization to kapok is seen at times. Although a relatively rare form of sensitization, it is important to be aware of its existence, as asthmatic patients are frequently advised to substitute kapok pillows for their feather ones, and if the patient should happen to be sensitive to kapok, such a change might do more harm than good. Kapok is a sort of floss or silky wool that is quite commonly used as a stuffing for pillows and cushions, and occasionally for mattresses. It is obtained from the pods of a tree indigenous to the East and West Indies that is closely related botanically to cotton plants. Patients sensitive to kapok are therefore usually sensitive to cottonseed. Sensitization to linseed meal, a common component of poultry feed, is another rather unusual cause of hay-fever and asthma.

CONCLUSION

The value of a history in bronchial asthma is dependent on: the care and patience with which it is taken; the physician's knowledge and appreciation of the significance of the various factors involved, which is acquired largely by experience; and the intelligence and cooperation of the patient.

1801 Eye Street N.W.

A SIMPLE COLOR TEST FOR BROMINE IN BODY FLUIDS *

GEORGE H. BELOTE, M.D.
Instructor in Dermatology and Syphilology, University of Michigan Medical School
ANN ARBOR, MICH.

Salts of bromine have largely been replaced by phenobarbital and other sedatives in the treatment of epilepsy, and as sedatives in other neurologic conditions. Nevertheless, bromides are still extensively used, particularly in the form of "patent medicines" and nostrums taken for the relief of headache, colds, influenza, and even as laxatives.

The untoward effects that not infrequently follow the ingestion of even small amounts of bromide are well known. The lesser evidences of what might be termed bromide intoxication, or bromism, are gastroenteritis, and the less severe types of bromexanthems or bromodermas. Of more serious consequence are occasional definite toxic psychoses and the more severe forms of bromodermas.

Of the three halogens, bromine is the most difficult to determine qualitatively in body fluids, especially in the presence of the other two.

In a recent study of the experimental aspects of iodide and bromide exanthems, Wile [1] showed that in body fluids bromine and chlorine could be liberated by the addition of potassium permanganate and sulphuric acid. The detection of the gases liberated under these conditions and their definite separation depended on the difference in the smell. When bromine was present in moderate or large quantities this was not difficult, particularly when the test was properly controlled by solutions containing chlorine alone. When bromine was present, however, in small amounts, considerable uncertainty existed as to whether the escaping gas was chlorine or bromine.

In certain cases, particularly those of toxic psychoses which have been induced by the ingestion of bromine salts, as well as in cases in which a definite diagnosis of bromoderma is difficult, a simple qualitative test for the detection of bromine in the urine would serve to establish a diagnosis when one might not be made by clinical criteria.

In 1898, Jolles [2] described a test for bromine in the urine by oxidation with potassium permanganate in acid solution. As an indicator he used filter paper moistened with aqueous solution of hydrochloride of *p*-dimethylphenylendiamine. The presence of bromine, according to this test, turned the paper from violet, through blue and green, to brown.

The difficulty attendant on this test, however, lies in the fact that iodine and chlorine color the indicator brown, but with different shades of the same color.

In 1907 Andrews,[3] in his article describing a quantitative method for the separation of chlorides and bromides, mentioned the use of fluorescein paper in testing for the presence of traces of bromine. The color change is described in this article as being from yellow to orange. Since his problem was one in quantitative chemistry, he of course makes no mention of a possible application to medicine.

* Studies and contributions of the Department of Dermatology and Syphilology of the University of Michigan, service of Dr. Udo J. Wile.

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2. Jolles, A.: Wien. klin. Rundschau, 1898, number 12.
3. Andrews, L. W.: Separation of Chlorides and Bromides, J. Am. Chem. Soc., 1907, p. 279.

The basis of the test here described lies in the transformation of fluorescein into eosin when bromine is added to the former, as shown by Fresenius.[4] This test not only recommends itself by its extreme simplicity, but as fluorescein is canary yellow and eosin pinkish red, there can never be any doubt as to whether bromine is present or not in the suspected material examined.

The test is carried out as follows: Small strips of filter paper are soaked in a saturated solution of fluorescein in 60 per cent acetic acid. These are then allowed to dry and may be kept indefinitely as indicators of the test. The suspected body fluid is placed in a test tube. To this are added a few crystals of potassium permanganate. After agitation, a few drops of concentrated sulphuric acid are added and the fluorescein paper is held, after moistening with 2 per cent acetic acid, at the mouth of the test tube.

The presence of even minute amounts of bromine is at once indicated by a rapid change in color from the original yellow to a bright pink on the paper.

The presence of chlorine and iodine in no way interferes with the detection of bromine in this test. A modification of the test has been tried and found successful, but not more delicate. It consists in blowing the released bromine gas into a second tube containing a solution of fluorescein. As the entire bromine present is in this way caught up in the fluorescein solution, it has a suggestive importance as a possible quantitative test.

During the past year we have succeeded in demonstrating bromine with this test in several cases in which a diagnosis was otherwise difficult or impossible at the time. In one case of toxic psychosis due to the ingestion of "Bromidia," bromine was detected by this test not only in the urine but also in the sweat, saliva, blood serum, gastric contents and spinal fluid.

The delicacy of the test has been experimentally worked out by us, and we have found it possible to detect bromine in a twelve hour urine specimen after the oral administration of 5 grains (0.3 Gm.) of sodium bromide.

The rapidity with which the test can be elicited is indicated by the fact that it was found positive in urine voided fifteen minutes after the oral administration of 10 grains (0.65 Gm.) of sodium bromide. Bromide added to the urine directly can be determined as bromine in dilutions of 1:40,000; in distilled water, in 1:80,000; in 5 per cent sodium chloride solution in 1:100,000, and in 20 per cent sodium chloride solution in 1:200,000 dilutions.

From the last two figures it is evident that instead of interfering with the detection of bromine the associated chlorine makes the test more delicate. In body fluid bromine was easily detected in sweat, spinal fluid, saliva and gastric contents, but found with greater difficulty in the blood. Washed red blood cells give a negative test, and serum obtained by centrifugalization gave a definite trace of bromine in the case of the patient with a toxic bromide psychosis.

CONCLUSIONS

1. The simple specific color test here described for bromine in body fluids is specific, is not interfered with by the presence of iodine, and is more delicate in the presence of chlorine.

2. In cases in which bromide intoxication is suspected, it is a simple diagnostic measure to differentiate between this and other forms of intoxication.

4. Fresenius: Qualitative Chemical Analysis, translation from seventeenth German edition by C. A. Mitchell, New York, John Wiley & Sons, 1921, pp. 450-451.

GRAVES' DISEASE

PROBABLE REASONS FOR FAILURE TO DISCOVER ITS ETIOLOGY

J. MARION READ, M.D.
SAN FRANCISCO

It is about a hundred years since Graves' disease was recognized as a clinical entity, yet small progress has been made in ascertaining its exact cause. A discussion of etiology published [1] in 1908 concluded with the comment that by "close clinical observation with accurate histologic examinations and with chemical and physiologic investigations such as are now being made, especially through the cooperation of surgeons who treat such cases, we may be sure that the answer will soon be given."

Almost two decades have passed since George Dock hopefully wrote that statement, but his expectations have failed of realization. The three factors to be considered briefly here are largely responsible for retarding progress along the path which will ultimately end in revelation of the etiology and pathogenesis of this disease. These factors are, first, the premature acceptance of theories and their accompanying terminologies which replace "Graves' disease" by other names carrying implications that its pathogenesis is known; second, a misconception of the part played by iodine in the normal and pathologic physiology of the thyroid; third, an uncritical acquiescence to the post hoc, ergo propter hoc argument in evaluating surgical and nonsurgical treatment.

The first factor probably will continue to operate and still longer postpone discovery of the cause of Graves' disease, for these false and blind paths have been worn deeply in the fields to be traversed. It will require a bold and independent spirit to undertake the search, one able to disregard the various theories already propounded, their nomenclature and phraseology, like false sign-posts, tending always to lead one astray.

NOMENCLATURE

It is regrettable that Parry, Graves or Basedow did not give this disease a name which might be used until such time as a really descriptive term based on a correct knowledge of etiology can be substituted. In the meantime it would seem preferable to call the disease after one of these three pioneers. The usual objection to naming a disease, diagnostic test or therapeutic measure after its discoverer, i. e., that it is not descriptive, is the reason for using it in this instance.

Four of the most frequently used synonyms will be discussed here because each of them implies a knowledge of etiology which does not exist, yet the implication imparts a feeling of confidence as unwarranted as the term itself.

HYPERTHYROIDISM

The term "hyperthyroidism" sprang into use at some time after 1886. In that year Moebius advanced the hypothesis that this disease was due to excessive thyroid secretion in contradistinction to Gull's disease, which had just previously been recognized as due to thyroid insufficiency. This attempt to explain physiologically their clinical observations was laudable at that time but continued use of this term is not justified by the facts available. It is objectionable because it commits one to a theory of the pathologic physiology of this con-

1. Dock, George: The Development of Our Knowledge of Exophthalmic Goiter, J. A. M. A. 51: 1119 (Oct. 3) 1908.

dition which has not been proved. Graves' disease cannot be produced by artificially increasing the amount of thyroid secretion in the body. The concluding proof, namely, demonstration of augmented secretion in the blood or lymph leaving the gland, has never been given.

Another objection to the use of "hyperthyroidism" more frequently advanced is that it fails to distinguish between Graves' disease and so-called toxic adenoma. But the validity of this objection is now questioned because the results of recent researches seem to confirm the suspicions, long harbored by many, that the latter term also is a misnomer.

Though its suggestion of a theory of pathologic physiology is vague, still "hyperthyroidism" fastens the attention too closely on the thyroid as the primary seat of trouble, whereas the hypothesis is quite tenable that this ductless gland may be only secondarily involved, its entire rôle in the disease process being a compensatory function. The interesting results obtained by the exhibition of iodine may be interpreted as supporting this view. This drug seems only to influence those signs and symptoms which are intimately related to abnormal thyroid function, chiefly pulse and basal metabolic rate, and thyroid hyperplasia. Its influence on other characteristics and the general course of the disease seems to be slight.

DYSTHYROIDISM

There is probably less reason to deprecate the use of "dysthyroidism," coined by Marie, since this term is sufficiently indefinite to leave open wide fields for further investigation. It also draws attention to the thyroid and in such a way as to include hypothyroidism; but since 1886 it has been frequently pointed out that there are many resemblances between Graves' disease and hypothyroidism. So far as the thyroid participates in this disease the term "dysthyroidism" is preferable to any others, though its use implies a belief that it is a disease primarily of this gland.

EXOPHTHALMIC GOITER

"Exophthalmic goiter" is the most misleading of all the synonyms for Graves' disease. It is purely a clinical term combining two of the most evident physical observations. But striking as are these two signs they are not constantly present. Either one or both may be absent and thus it happens that the literature contains such titles as "Exophthalmic Goiter Without Exophthalmos or Goiter." [2] If reliance is placed on the presence of these two signs, especially in the early stages, the diagnosis too frequently will not be made.

Literary purists may object to this term because it exemplifies a misapplied adjective and as such does not have a place in science, where exactness of expression and clarity of thought are interdependent and poetic license is unknown. A goiter cannot be exophthalmic. It may be soft or hard, bilateral or unilateral, nodular or smooth, vascular, substernal, cystic, hypertrophic or hyperplastic, but never exophthalmic.

Thinking and writing will be clarified and facilitated by discarding all these descriptive terms. Until more is known about the etiology and pathologic physiology of this condition, physicians should not prejudge any hypothesis by adopting its nomenclature, but should continue the use of a noncommittal term like Graves' disease.

2. Bram, Israel: Exophthalmic Goiter Without Exophthalmos or Goiter, M. J. & Record **119**: 33 (Jan. 2) 1924.

HYPERPLASTIC TOXIC GOITER

In 1913 Plummer [3] suggested a classification for diseases of the thyroid based on an attempted correlation between clinical and pathologic findings, designating as "hyperplastic toxic goiter" those cases fitting the description of Graves' disease. Use of this term has not become popular, for in addition to being too long for convenience, it confounds pathologic and clinical terms in a manner not at all illuminating. Hyperplasia is definitely proved to be the response to iodine deficiency, either relative or absolute, and does not bear a direct relationship to toxicity. The presence of a goiter means hyperplasia at its inception, and in most goiters there remain areas of hyperplasia in various stages of arrested involution toward the colloid or resting state.

IODINE

In reporting histologic study of the thyroids of seven patients with Graves' disease, Rienhoff [4] has described and pictured these areas of hypo-involution, as well as areas of hyperinvolution, which occur when iodine is given. These areas, of both types, impart a nodular character to many glands which have once been hyperplastic, and such nodular goiters have been designated "adenomatous." But Rienhoff's work has led him to believe that "these areas of hyperinvolution and hypoinvolution are not benign neoplasms of the thyroid gland or adenomatous in the true sense but merely residual histologic alterations occurring during an involution of the thyroid gland following an hypertrophy and hyperplasia." Allen Graham [5] has recently expressed the opinion that there is no histologic evidence justifying a sharp distinction between Graves' disease and so-called toxic adenoma. Probably the pathologic physiology of the thyroid in Graves' disease and so-called toxic adenoma is the same and the apparent disparity is to be accounted for by the differences in time during which these pathologic processes and physiologic readjustments are at work.

Although the work of Marine and others has established the relationship existing between iodine and the histologic structure of the thyroid, knowledge of the manner in which iodine acts in reducing the toxic manifestations of thyroid disease is still lacking. But it was not ignorance of its mode of operation which prevented iodine from becoming established as a valuable medicament in this disease.

The reason is found in the fact that iodine did not fit into the theories of etiology and pathologic physiology then in vogue. In fact, according to these theories, iodine was thought to be contraindicated. Nor is it probable that the exhibition of iodine in Graves' disease would have become as widespread as it now is but for the work of Kendall, Marine [6] and others which permitted the elaboration of theories in which iodine played a necessary rôle.

Is there not a lesson for us in the history of iodine and its neglected employment in thyrotoxic states? It was not discarded for lack of proof of its effectiveness. Evidence cropped up periodically, like the classic instance in 1863, when Trousseau prescribed tincture of iodine for tincture of digitalis and noted with surprise that the pulse had dropped from 140 to 90 when he saw

3. Plummer, H. S.: The Clinical and Pathologic Relationships of Hyperplastic and Nonhyperplastic Goiter, J. A. M. A. **61**: 650 (Aug. 30) 1913.

4. Rienhoff, W. F.: Involutional or Regressive Changes in the Thyroid Gland in Cases of Exophthalmic Goiter and Their Relation to the Origin of the So-Called Adenomas, Arch. Surg. **13**: 391 (Sept.) 1926.

5. Graham, Allen: Exophthalmic Goiter and Toxic Adenoma, J. A. M. A. **78**: 628 (Aug. 28) 1926.

6. Marine, David: Iodine in the Treatment of Diseases of the Thyroid Gland, Medicine **6**: 127 (Feb.) 1927.

the patient two weeks later. Even back in the time of Graves the beneficial effect of iodine is recorded. William Stokes in his book "Diseases of the Heart and Aorta," published in 1854, says, on page 278, of a young woman in whom the thyroid was mistaken for aneurysm, "A day was appointed for performing the operation of tying the carotid artery. Happily the true nature of the affection was discovered in time and the patient was cured by the use of sedatives and the preparations of iodine."

ROENTGEN RAY AND SURGERY

The third potent factor in discouraging further inquiry into the etiology of Graves' disease is the seeming success which has attended its treatment by the roentgen ray and surgery. In a self-limited disease running a prolonged course marked by remissions and recrudescences, the "post hoc ergo propter hoc" fallacy must be avoided in evaluation of therapy. But when theory accords with practice, naught remains of questionings; practice proves theory right and theory vindicates practice. Surgery and irradiation have been aided in attaining popularity because they fitted into the current theories of pathogenesis. The theoretical considerations have been largely abandoned, however, in the case of surgery for it has developed that the degree to which "hyperthyroidism" is checked bears little relation to the amount of tissue removed. The frequency of recurrences led the surgeons to advise the removal of more thyroid tissue. Each year the word has gone forth to remove more and still more tissue until it was considered that the ideal had been reached in a subtotal thyroidectomy. But now we learn that a subtotal thyroidectomy is inadequate and is being replaced by an attempt to remove all of the gland which can safely be removed, afterward placing reliance on replacement therapy for cure.

Here is an instance wherein practice based on theory ultimately shows the theory to be wrong. The only sound interpretation which can be placed on the results of thyroidectomy is that, when the organ becomes diseased beyond possibility of recovering its normal function, amputation becomes advisable. The evidence afforded by surgical treatment is as valuable in support of a theory of qualitative dysfunction as it is in supporting a theory of hypersecretion.

It is encouraging that yearly we acquire more skill in the management of patients with Graves' disease, thanks to perfection in surgical and irradiation technic and, recently, to realization of the benefits and limitations of iodine therapy. But is it not significant that these therapeutic results have not afforded a clue to the cause of Graves' disease? This in itself is enough to raise the suspicion that none of the current theories supporting our therapy will ultimately prove true. One cannot disparage the utility of theories in arriving at the ultimate truth, but care should be exercised lest they impede progress and obscure truth.

1183 Flood Building.

Situations Result in Responses.—A man's nature and the changes that take place in it may be described in terms of the responses—of thought, feeling, action and attitude—which he makes, and of the bonds by which these are connected with the situations which life offers. Any fact of intellect, character or skill means a tendency to respond in a certain way to a certain situation—involves a situation or state of affairs influencing the man, a response or state of affairs in the man, and a connection or bond whereby the latter is the result of the former.—Thorndike: Educational Psychology, p. 1.

ANTIMONY AND POTASSIUM TARTRATE IN CHANCROIDAL INFECTIONS

RESULTS OF INTRAVENOUS TREATMENT

ALFRED E. JONES, M.D.
CHICAGO

Chancroidal infections and especially the secondary ulcerations incident thereto have been known to be highly resistant to all forms of treatment. While most patients are seen in dispensary work, not frequently cases are encountered in private practice which baffle all our attempts at cure. Anything that will assist us in clearing up these indolent infections is sure to be appreciated by the specialist in this work.

TREATMENT

During the past year a number of patients suffering from chancroid and its complications have presented themselves for treatment at Mercy Hospital Dispensary. The routine treatment after dark-field illumination and blood Wassermann reactions established the correct diagnosis consisted in cauterizing, incision and draining when indicated and the application of frequent aseptic dressings. The drugs used were phenol (carbolic acid) and alcohol, silver nitrate and iodine, largely depending on the severity of the involvement. The length of time necessary to effect a cure varied from three to eleven weeks, with practically no difference in time according to the method of cauterization employed. In the last twenty-seven cases we have continued this routine treatment but in addition have used antimony and potassium tartrate (tartar emetic) intravenously. The results have more than gratified our expectations. The period of convalescence has been shortened more than one half, only one case which was especially severe requiring as long as six weeks; and the pain, discomfort, discharge and other disagreeable symptoms were rendered practically negligible. We have frequently noticed that after one injection the pain would disappear and the swelling in those cases involving the prepuce and glans penis would be considerably reduced.

Apparently the first to use antimony and potassium tartrate intravenously in the treatment of chancroidal infections was J. E. R. McDonagh[1] of London. In granuloma inguinale, a tropical disease etiologically related to but not identical with chancroidal infections, various investigators had obtained good results with antimony used locally and intravenously. Among them may be mentioned Araujo, Low, Newham and McDonagh. In the treatment of granuloma inguinale, therefore, the beneficial results from antimony treatment are well known. The local treatment is combined with intravenous injections of 5 cc. of a 1 per cent solution of antimony and potassium tartrate in saline solution given on alternate days. The quantity injected may be increased to 6, 7 or 10 cc. Probably because of the close relation between granuloma inguinale and chancroidal infections and the good results obtained in the former condition, McDonagh tried antimony and potassium tartrate intravenously in the treatment of chancroid. He also cites Potter[2] of Melbourne, Aus-

1. McDonagh, J. E. R.: Venereal Diseases, St. Louis, C. V. Mosby Company, 1920, pp. 267, 268, 363.
2. Potter, W. L.: The Value of Intravenous Injections of Antimony Potassium Tartrate in the Treatment of Chronic Secondary Chancroid Ulcerations, M. J. Australia 2:65 (July 27) 1918.

tralia, as reporting some excellent results with intravenous injections of antimony and potassium tartrate.

Case records are cited by McDonagh:

A man, aged 32, with a history of a soft sore on the penis, had a serpiginous ulcer involving practically the whole upper half of the anterior surface of the thigh. For two years and a half this ulcer had resisted every treatment imaginable. From the ulcer the intracellular form of Ducrey's bacillus was isolated. The patient received five intravenous injections of antimony and potassium tartrate with the result that the ulcer healed completely in three weeks.

A man, aged 34, with a history of a soft sore and a bubo, had a chronic ulcer in the groin. The ulcer presented a typical ulcus molle serpiginosum. Under potassium iodide internally, camphor-phenol and iodoform locally and antimony and potassium tartrate intravenously, the ulcer rapidly healed. Speaking of serpiginous ulcers following soft chancres, McDonagh says: "It is quite clear that any operative procedure makes matters very much worse and that unless exactly the specific treatment is prescribed, nothing is of any avail."

Potter's results with the antimony treatment of chancroidal infections were very favorable. He reported three cases, all in soldiers, in which intravenous injections of antimony and potassium tartrate as recommended by J. E. R. McDonagh, were administered and resulted in rapid and complete healing.

The first patient had a large serpiginous ulcer in the right inguinal region, following a chancroidal infection. Under various types of treatment, the condition persisted over a period of twelve and one-half months and became worse. Intravenous injections of antimony and potassium tartrate were commenced, 0.015 Gm. in 50 cc. of sterile water, and four days later 0.03 Gm. At the end of six days the ulcer looked better than it had for months. The injections were continued at intervals of four days. Two days after the third injection, the ulcer showed remarkable improvement. The ragged, undermined, thickened edge was replaced by a clean, healthy, thin margin, on a level with the ulcer. The reddish-purple inflammatory areola had disappeared; there was no discharge from the surface; new epithelium was seen growing in many places, and all pain had ceased. The dose was gradually increased to 0.06 Gm. in the usual amount of water (50 cc.), and in five weeks from the first injection, after a total of nine injections at four-day intervals, the ulcer had entirely healed.

The sudden dramatic improvement following the third injection of antimony and potassium tartrate, after the ulcer had proved resistant to other forms of treatment for many months, was very astonishing. The ulcer did not break down again. The second and third cases were on the same order except that one showed multiple ulcers in the inguinal region. One case healed after five injections of antimony and potassium tartrate and the other after six injections, and no further breaking down occurred. Consideration of these cases leaves no doubt that antimony was the predominant factor in their successful treatment. The impression is conveyed that without the administration of antimony and potassium tartrate the ulcers in these three cases would not have healed, and that other treatment was not of essential importance.

After an extended experience with the use of antimony and potassium tartrate intravenously in the treatment of granuloma inguinale, Goodman [3] of New York used the same drug in the management of chancroids. In 1925 Goodman made the following statement: "As far as I have been able to determine, there has been no record, at least in this country, of the use of tartar emetic intravenously for chancroids." (McDonagh in England and Potter in Australia had employed the treatment for chancroids.) Goodman reports four cases. From three to eight injections of antimony and potassium tartrate were administered intravenously, and in all four cases the condition healed rapidly with no further breaking down.

Kingsbury and Peck of New York [4] report on the treatment of phagedenic ulceration of the genitals and other chronic infections with intravenous administration of antimony and potassium tartrate. They quote Goodman specifically as having applied this treatment in chancroidal infections. According to these authors antimony and potassium tartrate is best used as a 1 per cent solution and for the occasional user it is best procured in 5 or 10 cc. ampules. For hospital or clinic use, it may be made up in quantities sufficient for several days, but on standing for longer periods in large quantities it has a tendency to form a sediment.

In our own series of twenty-seven cases treated by this method, twenty-three, or 85 per cent, were discharged as cured while in four cases the results were more or less uncertain as the patients were lost track of after one or two injections. Of the twenty-three cases which we were allowed to follow to their termination, seventeen occurred in the colored race and six in the white race. Two of the twenty-three cases were simple uncomplicated chancroids with a merely palpable, slightly painful inguinal adenitis, while twenty-one showed either multiple lesions of the penis or single chancroid complicated by suppurative lesions of the inguinal region or the upper anterior femoral region. The smallest number of injections given was two, and the largest eight. We used a 1 per cent solution of antimony and potassium tartrate in sterile water. The water was boiled, and after it was allowed to cool, the antimony and potassium tartrate was added. This obviates decomposition of the drug if it is boiled with the water. We began with a dose of 3 cc. and increased the dose 1 cc. with each injection. The injections were given at four-day intervals. Only one patient received as much as 10 cc. at one administration. In no case did we encounter any serious reaction from the drug. Milder reactions, such as coughing, salivation and vomiting, occurred in nine cases. The vomiting in two cases was quite severe.

CONCLUSIONS

The period of convalescence or hospitalization of patients suffering from chancroidal infections and their complications will be reduced at least 50 per cent if, in addition to local treatment, antimony and potassium tartrate is administered intravenously.

The pain, discomfort, discharge, edema and other disagreeable symptoms will be perceptibly lessened or almost entirely disappear after the first few injections.

A 1 per cent solution of antimony and potassium tartrate is used. An initial dose of 3 cc., increasing 1 cc. with each dose up to 10 cc., with the administrations at four-day intervals, seems to be amply sufficient.

Of the twenty-seven cases treated at the Mercy Hospital Dispensary, twenty-three, or 85 per cent, showed excellent results.

Serious reactions were not encountered, although 30 per cent of the patients showed milder reactions, such as coughing, salivation and vomiting, all of which cleared up in a few hours. This is a higher percentage of reactions than is reported by most authors.

108 North State Street.

3. Goodman, J.: Treatment of Chancroid with Tartar Emetic Solution Intravenously, J. Urology **13**: 489 (April) 1925.

4. Kingsbury, Jerome; and Peck, S. M.: Treatment of Phagedenic Ulcerations of the Genitals, J. A. M. A. **87**: 1900 (Dec. 4) 1926.

SPLENIC ENLARGEMENT IN HYPERTHYROIDISM *

C. W. BALDRIDGE, M.D.
AND
F. R. PETERSON, M.D.
IOWA CITY

Splenic enlargement in hyperthyroidism has been very little mentioned in the voluminous literature on diseases of the thyroid gland. The occurrence of nodules, clumps and diffusely scattered lymphoid cells within the thyroid gland in exophthalmic goiter is an observation of long standing. A moderate lymphocytosis in the circulating blood of these cases has also been generally observed. MacCallum [1] speaks of a generalized hyperplasia of the fixed lymphatic tissue. Foster [2] includes the spleen in the generalized lymphoid reaction but does not convey an accurate notion as to the degree of splenic enlargement in exophthalmic goiter. Cameron and Sedziak [3] found that the feeding of thyroid extract to adult white rats resulted in a relative and absolute increase in the weight of most visceral organs. The increase in weight of the spleen and lymph nodes was proportionally more than that of other organs.

Incidence of Palpable Spleens with Exophthalmic Goiter

Average	Forty-Four Cases With Palpable Spleens	100 Cases Without Palpable Spleens
Age	37.7 years	36.2 years
Duration of symptoms	4.3 years	2.6 years
Basal metabolic rate on admission	+48.1%	+51.5%
Microscopic hyperplasia in cases in which operation was done	81.0%	93.0%
Adenomatous tissue	21.7%	16.6%

We have recently become impressed by the fact that splenic enlargement is quite frequent in severe and long standing cases of hyperthyroidism. Enlarged tonsils and superficial lymph nodes are also quite frequently observed. Obviously, however, it is very difficult to establish the cause for hyperplasia of the latter structures in any given case. The spleen, on the other hand, is usually not measurably affected by such intercurrent and local infections as cause hyperplasia of the tonsils and regional lymph nodes. In this series of cases we have considered as palpable only those spleens in which a definite edge could be felt with the patient either on his back or on his right side. Some increase in dulness in the splenic region has been noted in many cases in which an edge could not be felt, but because of the uncertainty in this observation no attempt has been made to estimate the size of a nonpalpable spleen.

From July 1, 1925, to Jan. 1, 1927, 144 patients with exophthalmic goiter were studied. Of these, forty-four, or 30 per cent, have had palpable spleens. From none of the patients with enlarged spleens were we able to obtain a history of malaria or other disease usually associated with splenic enlargement. Further analysis of our cases of clinical exophthalmic goiter is given in the accompanying table.

During the same period, eighty-one cases of adenomatous goiter were observed. Hyperthyroidism was present in forty-two of the eighty-one cases, but in no instances were there the typical manifestations of exophthalmic goiter. Only three patients of this group had palpable spleens.

The cause for enlargement of the spleen in exophthalmic goiter is not clear. The following suggestions taken from the literature are of interest: Krumbhaar,[4] speaking of the functions of the spleen in relation to other organs, says: "Against the thyroid, the spleen has been thought by the Asher school to have an antagonistic action; splenectomized animals are more susceptible to oxygen lack than normal animals, thyroidectomized animals less so (Streuli); the thrombin content of the serum is diminished after splenectomy, increased after thyroidectomy (Yamada); the spleen inhibits blood formation, the thyroid stimulates (du Bois) (N. B. . . . I have given reasons for believing that the spleen stimulates, not inhibits, blood formation). The diminished susceptibility of thyroidectomized rats is denied by Klinger, who also takes exception to Yamada's deductions. At best, these observations await confirmation." It would not seem justifiable, therefore, to account for the splenic enlargement in hyperthyroidism as being due to any specific antagonistic action between the spleen and the thyroid gland.

Beattie and Dickson,[5] in their discussion of exophthalmic goiter, state that "the spleen is occasionally enlarged, and exhibits, as a rule, evidence of increased hemolytic activity." We know that the spleen is often enlarged in diseases characterized by increased blood destruction, but we do not have proof that such splenic enlargement is the direct result of increased hemolysis. While the bone marrow in exophthalmic goiter is often moderately hyperplastic, the spleen in our experience does not show any demonstrable increase in hemosiderin. The blood serums in several cases of rather severe exophthalmic goiter have given neither direct nor indirect van den Bergh reactions. Urobilin and urobilinogen estimations on the stools and urine in the same cases have shown no appreciable increases. We would therefore not be inclined to attribute the splenic enlargement in hyperthyroidism to an increase in the destruction of red blood cells.

Two possible explanations for the splenomegalia are apparent from the study of our cases: First, that the splenic enlargement is passive and is secondary to cardiac failure or to cirrhosis of the liver, either toxic or cardiac; and, second, that the enlargement of the spleen is an active process with lymphoid hyperplasia and is only a part of a generalized hyperplasia of lymphoid tissue. Of these the latter seems the more plausible.

None of the patients with enlarged spleens presented the clinical features of portal obstruction, though in six instances there were signs of advanced cardiac failure. Three of these patients died, but in the remaining three, compensation, with fair cardiac reserve, followed thyroidectomy, and the residual hepatic injury was not demonstrable clinically. Moreover, thirty-eight of the patients with splenic enlargement presented neither present nor historical evidence of cardiac failure and none of the clinical manifestations of liver injury. Even if the splenic enlargement were due to passive congestion, this would in no way explain the hyperplasia of the lymphoid follicles or the similar hyperplasia of

* From the Departments of Internal Medicine and Surgery, State University of Iowa College of Medicine.

1. MacCallum, W. G.: The Pathology of Exophthalmic Goiter, J. A. M. A. **49**: 1158 (Oct. 5) 1907.
2. Foster, N. B., in Nelson's Loose-Leaf Medicine, **3**: 293.
3. Cameron, A. T., and Sedziak, F. A.: The Effect of Thyroid Feeding on the Growth and Organ Hypertrophy in Adult White Rats, Am. J. Physiol. **58**: 7 (Nov.) 1921.
4. Krumbhaar, E. B.: Functions of the Spleen, Physiol. Rev. **6**: 169-200 (Jan.) 1926.
5. Beattie and Dickson: Textbook of Pathology, ed. 3, 1926, p. 841.

the lymphoid tissues in other parts of the body. The spleens in our fatal cases without the clinical manifestations of chronic cardiac failure have shown no appreciable evidence of passive congestion.

In none of the cases without cardiac failure was the spleen more than 1 or 2 cm. below the costal margin, and the edge was soft and elastic to the touch. In a few instances the spleen definitely became palpable with the patient under observation, and in a very few its size has decreased measurably following thyroidectomy. The patients, as a group, have not been followed long enough to warrant a positive statement in regard to decrease in the size of the spleen following operation. In the four of our fatal cases in which necropsy was obtained, the spleen showed marked lymphoid hyperplasia, as did all the other fixed lymphatic tissues. Similar observations are reported by MacCallum and by others, while Wade Brown [6] states that "abnormalities of lymph nodes were found, cystic degeneration being a comparatively frequent occurrence" in thyroidectomized rabbits. An analogous lymphoid hyperplasia is often seen in other nonbacterial intoxications.

SUMMARY

1. Splenic enlargement in hyperthyroidism is more frequent than one would be led to believe from its lack of mention in the literature.

2. The enlargement of the spleen is part of a generalized lymphoid hyperplasia.

3. The duration of the disease is the most constant single factor in determining splenic enlargement.

4. In our series of cases, palpable spleens were found almost exclusively in those patients presenting the clinical features of exophthalmic goiter.

CHANCRE OF THE NASAL SEPTUM

REPORT OF THREE CASES

ERWIN P. ZEISLER, M.D.
Attending Dermatologist, Cook County Hospital
CHICAGO

That a primary syphilitic infection of the nasal septum may not be as rare as generally supposed is indicated by the subjoined three cases seen in private practice within the last five years.

REPORT OF CASES

CASE 1.—A man, aged 30, married, was seen, Nov. 13, 1926, because of a cutaneous eruption and a lesion within the nose, producing swelling and obstruction of the left nostril. For six weeks he had noticed a "sore" in his nose which caused difficulty in breathing on that side, swelling of the face, and pain radiating to the forehead. For several weeks he had received local treatment at the Eye and Ear Infirmary, where he was told that he had an ulcer in his nose and sinus trouble. For the past two weeks the glands at the angle of the left jaw had been swollen. A Wassermann test made prior to admission was negative. The eruption was first noticed five days before, and at the same time he began to complain of nocturnal headaches, slight fever and malaise.

The patient was well developed, but anemic looking. The temperature was 99.4 F.; the pulse was 90, and the respirations were normal. The left side of the face around the nostril was edematous and the left nostril gaping. Examination of the interior of the nose revealed an elevated granulomatous ulcer at least 1.5 cm. in diameter occupying the entire anterior part of the left nasal septum, and producing almost complete obstruction on that side. The lesion gave rise to a scanty discharge, bled readily, and was indurated. The right side of the septum was normal. There was a firm packet of glands in the left submaxillary region.

Examination of the trunk and extremities showed a typical macular syphilid. There was general adenitis. Lesions were not present on the genitalia. Dark field examination of the serum from the intranasal lesion revealed numerous actively motile spirochetes. The Wassermann reaction twenty-four hours later was reported four plus positive. The intranasal lesion, as well as the eruption, rapidly healed under antisyphilitic medication with the arsphenamines and mercury.

CASE 2.—A physician, aged 40, was seen in the latter part of 1922 on account of a lesion of the septum of ten days' duration, which was suspected of being an early chancre. The patient indistinctly remembered having picked his nose about a month previously, after examining a group of patients in an industrial establishment.

On examination there was found a round, shallow, bright red erosion of the anterior part of the nasal septum, about 0.75 cm. in diameter. A small, firm, submaxillary gland was palpable on the same side. Dark field examination revealed *Spirochaeta pallida*. The Wassermann test was negative. Treatment was promptly instituted and continued for a year, with an apparent clinical cure. The intranasal lesion healed without perforation. Symptoms or signs have been absent over a period of four years, and repeated Wassermann tests have been negative.

CASE 3.—A man, aged 45, unmarried, was referred in January, 1924, for the diagnosis of a cutaneous eruption which had been present for two weeks. He stated that he had noticed a sore in his nose for six weeks, and had been treated locally by a well known rhinologist for an "ulcer." The glands in the right cervical region began to enlarge three weeks before.

Examination revealed a crusted ulcer on the right nasal septum, measuring a little less than 2 cm. across, with an indurated cartilaginous border and considerable edema of the surrounding mucous membrane. There was a massive bubo in the right submaxillary region. The trunk, face and extremities showed a maculopapular syphilid. The diagnosis was confirmed by a positive dark field examination and blood test.

COMMENT

The foregoing cases are illustrative instances of primary syphilitic infection of the nasal septum. In two, the diagnosis was not made until the supervening glandular swelling and the exanthem made it self-evident. In one case, the correct diagnosis was made by the examining rhinologist, and confirmed by finding *Spirochaeta pallida* in the early seronegative stage, the ideal time for abortive treatment. The most important point in the early diagnosis of a hard chancre of the septum is the erosion or ulceration with indurated border on the septal surface, which bleeds easily but does not cause perforation. The surrounding mucous membrane may be edematous, clogging the nose and producing some discharge. There may also be swelling of the outer surface of the nose, and at times pain radiating to the teeth, eyes and forehead, as pointed out by Menzel.[1] The discrete, painless submaxillary bubo is an important diagnostic point, as this does not occur in the commoner tertiary lesions within the nose.

The differential diagnosis must exclude the various forms of late syphilis, particularly the circumscribed gumma of the septum with crater-shaped ulceration and perforation; tuberculosis, either in the form of the solitary tuberculous ulcer or an ulcerating lupus vulgaris, and epithelioma involving the septum. In rare instances, a rhinoscleroma may have to be ruled out.

In the literature on syphilis, scant mention is made of the possibility of primary intranasal syphilis, but

6. Brown, Wade; Van Allen, C. M., and Pearce, Louise: Personal communication to the authors.

1. Menzel, K. M.: Syphilis of the Nose and Nasopharyngeal Space, Wien. med. Wchnschr. **76**: 457, 1926.

cases are on record of infection carried by fingers, handkerchiefs, towels and sponges. Rhinologists, who are the first to see these lesions, should recognize the necessity of making the diagnosis as early as possible, and the importance of dark field examination in suspicious ulcers or erosions of the septum.

30 North Michigan Avenue.

THE TREATMENT OF LOBAR PNEUMONIA IN A GENERAL HOSPITAL*

LEO KESSEL, M.D.
AND
HAROLD T. HYMAN, M.D.
NEW YORK

Since November, 1925, all patients with lobar pneumonia admitted to the Mount Sinai Hospital have been studied by a pneumonia commission.

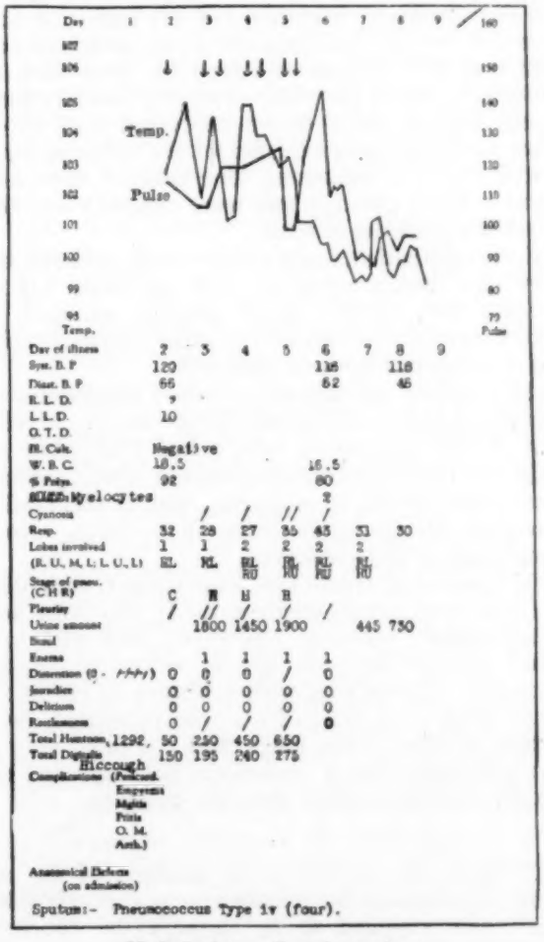
The "pneumonia routine" employed in this series consisted of the following orders: (1) in bed; (2) forced fluids (milk, 1,000 cc., fruit drinks, broth, coffee, tea); (3) sponge for 103 F.; (4) enema daily; (5) turpentine stupes when needed; (6) tincture of digitalis, 1 drop per pound on admission, and 45 minims daily thereafter; (7) morphine sulphate, one-fourth grain (16 mg.) on admission; (8) blood pressure daily; (9) leukocyte count and differential determination every two days; (10) blood culture; (11) sputum for culture and typing as soon as obtainable. As an expectorant, when needed, anisated spirit of ammonia, 30 drops every two hours, was used. For pain or restlessness or harassing cough, codeine sulphate, 1 grain (0.065 Gm.) hypodermically was used, to be repeated in four hours if necessary. If there was cyanosis, oxygen was administered by the Barach apparatus, one hour on and one hour off. If ileus developed, the patient was to be stuped, then to receive an enema of oxgall, turpentine and asafetida; and finally, if necessary, pituitary extract was to be administered intramuscularly. Immediately on admission, one member of the commission was to come to the hospital and administer the Huntoon pneumococcus antibody solution (H. K. Mulford Company), intravenously, the dose at first being 50 cc., but in later cases 100 cc. This was administered with the apparatus supplied by the Mulford Company, and it was given warmed and quite slowly. Throughout the course of the illness, the patient was seen usually three times a day by some member of the commission. The blood pressure, lung signs, heart diameter, pulse, temperature and respirations were charted on the form chosen for these patients. The pneumococcus antibody solution was repeated every six hours, unless the temperature was below 101 or 102 F. Special nursing was not used except when specially indicated.

No simultaneous control series was run. The uncontrolled variables, such as (1) age of the patient, (2) day of admission, (3) type of invading organism and (4) degree of bacteremia, render a "control" series a remote gesture. In the last analysis the results of therapy in lobar pneumonia will rest a great deal more on clinical judgment than on statistics.[1]

In all, fifty-six patients were seen, of whom nineteen died (34 per cent). For the purpose of comparison, the gross pneumonia statistics of the hospital were studied for a ten-year period preceding this year, omitting the year of the influenza epidemic. In 1924, seventy-three patients were treated, with a mortality of 16 per cent; in 1923, fifty-six patients, with a mortality of 32 per cent; in 1921 and 1922, 108 patients were treated, with a mortality of 20 per cent.

In our series were thirty-nine men and seventeen women. Twelve men died and seven women, the ratio in the two sexes being almost exactly equal.

Twenty-five patients were below the age of 40, and these had a mortality of only 16 per cent. The remaining thirty-one were over 30, and the mortality in the



Method of recording observations.

older patients was almost 45 per cent, no striking variations being noted in the various decades.

The average day of admission of the patients who lived was three and nine tenths, and of those who died, four days. No patient was admitted on the first day of illness; thirteen patients were admitted on the second day, of whom ten recovered and three died (23 per cent); on the third day, sixteen, of whom ten recovered, and six died (37 per cent), and on the fourth day, eighteen, of whom twelve recovered and six died (33 per cent). Of five patients admitted on the fifth day, one recovered and four died (80 per cent); of four admitted on the sixth day or after, all recovered.

Twenty-eight patients had a single lobe involved, and of these eight died (28 per cent). Of twenty-eight with more than two lobes involved, the same number died. When there was a double pneumonia, i. e.,

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* From the Medical Service of the Mount Sinai Hospital.

1. Originally we planned to use the specific therapy only in patients who entered early in the course of the disease. Afterward, owing to the small number of early cases admitted, the scope of the therapy was extended to include all the patients admitted, with the hope that an occasional late case might be benefited.

involvement on both sides, the mortality was about the same. Those who had a right lobe involved presented a lower mortality (22 per cent), than those who had a left lobe involved, of whom 55 per cent died. When spreads occurred after admission the mortality was very much higher (over 60 per cent), and when the spread crossed into the other lung the mortality was over 66 per cent. It seems apparent that left lobe involvements are more dangerous than right; and that, when a spread occurs while the patient is under observation, the prognosis is particularly bad, and more so if the spread is in the opposite lung from that originally involved.

Observation of the effect of the type of invading organism showed that eleven patients had a type I infection. Of these eight recovered and three died, a mortality of 27 per cent. Of nine patients with type II, five recovered and four died (44 per cent); of six with type III, five died (83 per cent); of seventeen patients with type IV, thirteen recovered and four died, giving a mortality of 23 per cent. Thirteen patients were not typed, and of these eleven recovered and two died. Once again we have evidence of the extreme virulence of this type III organism. The untyped cases all gave negative blood cultures, and were naturally less virulent infections than the others.

Forty-one patients had sterile blood cultures, and of these nine died, a mortality of 22 per cent. Of fifteen patients with positive blood cultures, ten died. Bacteremia obviously signifies a more serious infection and a more unfavorable prognosis.

Of fourteen patients who showed myelocytes in the circulating blood, eight died (52 per cent). Myelocytes were usually associated with a low total white count.

Of the complications encountered, three patients, or 5 per cent, developed empyema, and in the fatal cases practically all developed edema of the lungs. No other complications were observed.

Of associated conditions, one patient with diabetes and two with arteriosclerosis died; two with positive Wassermann reactions recovered; one girl with a mitral stenosis died; two gravid women made striking recoveries. Three men with a history of chronic alcoholism died. Of the patients who recovered, two had chronic changes in the lungs, and it seemed very likely that both really had a pneumonia superimposed on the chronic condition, rather than the contrary.

RESULTS OF SPECIFIC THERAPY

Of particular interest is the analysis of the results of the injections of the pneumococcus antibody solution, which was supplied to us through the courtesy of Dr. F. M. Huntoon of the H. K. Mulford Company.

Number of Injections.—In the group reported, 215 injections were made, and an average of 350 cc. was given to each patient treated. A total of 18,800 cc. of the solution was employed. The largest amount given to any patient was 700 cc., and the greatest number of injections was seven. Certainly an ample amount of the solution was used to have produced a specific therapeutic effect.

Reactions.—Of the 215 injections made, 144 did not produce any reaction, and seventy-one were associated with a reaction. Of these reactions the vast majority consisted simply of a chill and slight rise in temperature, of rarely more than 3 degrees.

One death occurred as the direct result of the exhibition of the specific substance. This was in patient 45, from the use of lot 90411. A single administration of 100 cc., with the usual careful technic, resulted in a hyperpyrexia and a death which seemed unquestionably the direct result of the reaction. The majority of the patients were given lot 84053, and later lots 91972, 98465 and 1292.

Clinical Effects.—With regard to the clinical effects observed, the patients could be divided into six classes. Of these, group 1 consists of nineteen patients who died. In this group are included two with arteriosclerosis, three with a history of alcoholic addiction and one with diabetes, in all of whom the outlook was necessarily unfavorable. Certainly in none of the remaining cases could any favorable effect be seen from the specific substance. In group 2 are nineteen patients who had absolutely no permanent effect from the administration of the solution. All had an alteration in the temperature chart, in that for a few hours after the administration of the serum there was a drop in temperature and occasionally a lower respiratory rate. In none of these patients, however, was the effect permanent; in none of these instances did the temperature reach normal before the expectancy, and in none of these cases was the commission impressed with any clinical improvement. In group 3 are five patients who were desperately ill and who recovered, but in whom the recovery seemed not to be related to the administration of the substance. In all these patients (4, 39, 44, 57 and 58) the substance was used and discontinued from twenty-four to forty-eight hours before improvement was noted; later than one would expect to obtain a specific therapeutic result. In group 4 are three patients (2, 9 and 33) in whom some complicating factor rendered it wiser to exclude the result from the statistical study. In group 5 are seven patients in whom a real and seemingly specific result was observed. In these seven instances an immediate, striking and permanent effect was noted. Five of these patients were not treated until the fourth day, and two on the third day of the disease. None of these patients had a positive blood culture, so that they were presumably less seriously ill than many of the other patients in the series. Four had a type IV pneumococcus infection and two were not typed, in both of which groups the mortality was less than in any other. One patient had a type I infection. The average amount of the substance used in these instances was 200 cc., and usually not more than two injections were made. It seems, then, that the patients who reacted favorably were the least seriously ill, and that the response occurred from the administration of less than the average number of injections. In group 6 are seven patients in whom a questionable beneficial result was obtained. Two of these seven patients were admitted late in the disease, one on the eighth day and the other on the twelfth day, so that while a prompt crisis occurred, no inference concerning the specificity of the result was absolutely justified. Of the other five patients, three were admitted on the third day and two on the second day. In these patients a crisis or defervescence was observed on the fifth or sixth day. One of these patients had a type I and one a type II infection. The other five were not typed, and consequently were less seriously ill than the average patient observed. None had a bacteremia. Nevertheless it was the clinical impression that they were benefited by the injections.

An impartial summary of the effect of the pneumococcus antibody solution is somewhat difficult to give. Certainly one patient died as a result of toxicity in one of the lots of the solution. The gross mortality was not lowered. In the cases with a bad prognosis,

such as a type III, all with bacteremia and all those with associated conditions such as alcoholism or atherosclerosis, no beneficial results were observed, and it is in this type of case that a specific substance is most needed. In only fourteen individuals, all with sterile blood cultures and usually of the type IV or untyped classifications, could any therapeutic result be claimed, and in seven of these fourteen the result was open to question. Seven results, however, were brilliant, and it is interesting to note that in the seven brilliant results the substance was not administered until the third or fourth day, and then in relatively small amounts, so that the failure in the other groups seems less likely to be related to the day of admission or the amount of substance used. To investigate this point further, we took out for separate study all patients admitted within the first seventy-two hours of the disease. In this group were twenty-nine patients, or about half of the total. Nine deaths occurred, or 31 per cent, and in only five of the patients (17 per cent), could a definite therapeutic effect be noted, so that there seemed to be very little difference between the effects in the early group and the late group.

SUMMARY

Fifty-six patients with lobar pneumonia were treated by a regimen that included the administration of the pneumococcus antibody solution. No constant specific therapeutic effect was observed. Here and there an isolated observation pointed to the possibility of a specific effect. These results were independent of the nonspecific chill, and while they are encouraging, we feel that they are not sufficient to warrant the advocation of the routine use of this substance in the treatment of lobar pneumonia in a general hospital.

MALABSORPTION IN DEFICIENCY DISEASES

FRANCIS LOWELL BURNETT, M.D.
AND
PERCY R. HOWE, D.D.S.
BOSTON

In discussing deficiency diseases, McCarrison [1] says:

> The term "deficiency diseases" is customarily applied to a group of maladies which are caused by the lack of one of the accessory food factors. This application, however, is too restricted and should embrace disorders also due to faulty and unbalanced food. The vitamins have been largely responsible for such a narrow outlook on the diseases which are either favored in their origin or initiated by an insufficient supply of these substances. By speaking of the antineuritic vitamin the attention is drawn to one system of the body, while others are ignored. But in experimental animals on a deficient diet without vitamin B there is loss of appetite, impaired digestion, diarrhea, colitis, unhealthy skin, low temperature, slow respiration, cardiovascular depression, progressive anemia and asthenia, long before nervous symptoms are produced. Do not these form a disease syndrome, in children especially, which is as familiar as its cause is unrecognized?

Jackson [2] says:

> The peculiar effects of the various types of inanition constitute the characteristic syndromes of the corresponding deficiency diseases, such as pellagra, xerophthalmia, rickets and scurvy.

Hopkins [3] says:

> But the clear differences in function demonstrated by the differences in the effects of (vitamin) deprivation have constituted the main belief in their diversity. In studies in metabolism, however, it is well to remember that chemical events in the organism, though they be more or less isolated experimentally, form an organized whole. No one process in the body can be rendered abnormal without ultimate effects on other processes.

Incomplete food in experimental animals causes metabolic disorders, and there is a failure in the transfer of food to the cells of the body. Diarrhea or constipation and malabsorption are the first signs of the metabolic disorders. These early and slight deviations from normal nutrition are not generally recognized, but they continue until changes occur in the tissues and then a deficiency disease is readily recognized. Similarly, in human deficiency diseases incomplete and faulty food may cause metabolic disturbances, changes in the intestinal rate, and general disorders of the body for months and perhaps years before a diagnosis can be made. In both cases the oversight appears to be due to a failure to understand and apply the indexes of normal absorption.

As one of us has been adjusting diets according to the absorption in producing scurvy, rickets and polyneuritis in animals, and the other has been educating patients with some of the metabolic disorders with regard to how and what to eat to get normal absorption in the restoration and control of health, we wish to present the evidence so far recorded that relates to absorption and the deficiency diseases, and to point out that incomplete and faulty food primarily produces intestinal indigestion and malabsorption.

ABSORPTION AND ANABOLISM

Food is consumed to nourish the cells of the body. Complete and proper nourishment, however, is a very complex and delicately adjusted process. The alimentary canal of every animal forms a highly perfected apparatus for the mechanical mixing, the chemical reduction, and the absorption of its contents. These processes are nicely correlated; and the bodies that generally absorb the digested products from the normal action of the nutritive apparatus develop normally and are maintained in health. The digested products entering the body are too complex to understand or analyze at present, but as a form of the feces, a passage of a meal through the digestive tract or an intestinal rate are indexes of normal absorption. These indexes should serve as valuable signs in improving the anabolic processes and the restoration and control of health. A third indication of absorption should be made on the weight of the body. Normal absorption, however, appears to be somewhat limited, and is dependent not only on a diet containing the accessory, but also one devoid of the faulty, food factors. This assertion is made from an understanding of the peculiar yet apparently normal action the proximal colon exercises in the control of nutrition. About a third of the intestine forms a secondary digestive pouch by the action of physiologic constriction rings. The action of these rings is evidently brought about with a complete, properly proportioned and prepared alimentary mixture only when the demand for nourishment is greater than the supply. For the same reason, waves of antiperistalsis course over this portion of the intestine and appear to bring about complete digestion and absorption of vegetable

1. McCarrison, Robert: Studies in Deficiency Diseases, London, Frowde and Hodder, Stoughton, 1921, pp. 3-5.
2. Jackson, C. M.: Inanition and Malnutrition, Philadelphia, P. Blakistons' Son & Co., 1925, p. 5.
3. Hopkins, F. G.: Brit. M. J. 2: 691 (Oct. 20) 1923.

foods. But this mechanism by which the carbohydrate metabolism seems to be completed also forms the intestinal contents into discrete masses or units, which are readily observed in the normal feces. Thus, this complex and sensitive mechanism essential for normal nutrition exercises a control not only over the kind but also over the amount of food consumed.

An understanding of the restricted limits of normal absorption and assimilation leads to the recognition of two subtle and vaguely symptomatic types of malabsorption. In one type there is a loss of appetite, and the food ingested is insufficient to supply the demands of the body and leave a residue for excretion. As a result there is an abnormal retention of the intestinal contents, and dejections are infrequent and scanty. Patients with this type of malabsorption usually resort to cathartics; the metabolic disorder is made worse, and the bodily functions are still further impaired. The disorder, however, is not due to the digestive apparatus, for when more food is consumed and cathartics are eliminated, the digestion is improved and after a while daily dejections become regular. Then as the functions of digestion and absorption approach normal, a sign of the improved action is manifested by a healthy hunger. In the other type sufficient food is consumed, but on account of being incomplete or faulty it passes too rapidly through the digestive tract. A report on the variations of the intestinal rate has already been published.[4] But here, too, the metabolic disorder is due to the ingested material and not to the nutritive apparatus. Graphic illustrations of these two types of malabsorption are shown in figure 1.

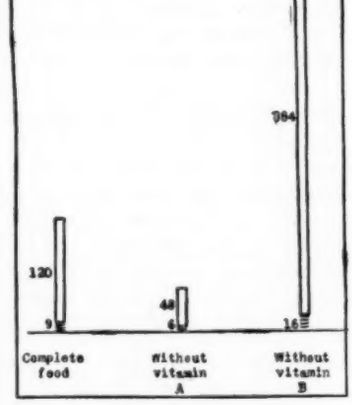


Fig. 1.—Graphic illustrations of intestinal rates in rats made by observing the first and last appearance of charcoal in the feces in hours after ingestion. The first column of nine to 120 hours represents normal absorption in animals consuming a complete food; but in the second of six to forty-eight hours there is malabsorption from a diet without vitamin A, and in the third an abnormal retention of sixteen to 384 hours from food without vitamin B. (The diagrams were copied from Gross.)

MALABSORPTION IN ANIMALS WITH DEFICIENCY DISEASES

The immediate effect of incomplete food on digestion and absorption in animals, as shown by loss of appetite, vomiting, diarrhea, dysentery, asthenia and decreased weight, has been emphasized by McCarrison.[5] A somewhat more detailed study of malabsorption in animals has been made by Gross.[6] He mixed charcoal with the food of rats and noted the time it took to appear in and disappear from the feces. With properly fed animals the marker was first seen in nine and last seen in 120 hours. Under these circumstances, digestion and absorption are complete, and uniform and firm fecal units or scybala are dejected daily. But animals without vitamin A ate voraciously, and the charcoal was seen only between six and forty-eight hours. With the omission of an essential food and an absorption time of less than half the normal, the development of a deficiency disease from malabsorption is obvious. On the other hand, animals without vitamin B lost their appetite and ate very little food. The diminished intake apparently had a marked influence on absorption. Normally nourished rats deject fifteen or twenty well formed fecal units a day; but under the influence of vitamin B deprivation and insufficient food, only two or three fecal units were dejected; and there was such a demand for the small amount of nourishment that there was abnormal retention, and the charcoal was dejected between sixteen and 384 hours after ingestion. An absorption of this kind is somewhat similar to constipation brought about from too little food and an insufficient residue to form daily dejections. These intestinal rates are graphically shown in figure 1.

The intestinal rate of animals on a vitamin C deficient diet was not studied with charcoal. Another index of absorption, however—the fecal unit—dejected by guinea-pigs fed a scorbutic diet by one of us (P. R. H.) indicates a malabsorption somewhat similar to that of the animals without vitamin A. Illustrations of these fecal units beside the normal are shown in figure 2. They were recovered from the animals used for the investigation of scurvy by Wolbach and Howe.[7] The symmetry of form, the equality in size, and the firmness of the normal are in great contrast to the irregularity of form, variation in size, rough surface and softness of the abnormal fecal unit. Furthermore, as these discrete masses are formed by the constriction rings that limit the proximal colon, they are an indication of intestinal indigestion and malabsorption in this delicately adjusted portion of the digestive apparatus.

Malabsorption in animals without vitamin C has also been described by Veeder:[8]

> The bowels may be either loose or constipated. Monkeys in whom I produced experimental scurvy suffered from continuous diarrhea, and there is no chemical basis whatever for the belief that scurvy is due to the absorption of toxin from a colon impacted with feces.

Still further evidence of this relationship has been observed recently by Mellenby:[9]

> Another condition which commonly develops in puppies when fed on diets containing an excess of cereal and a deficiency of fat soluble vitamin is diarrhea. Diarrhea may appear soon after the diet begins and before there is obvious bone deformity. The better the puppies are fed during the preexperimental period, the longer time will elapse before the defective diets are accompanied by diarrhea. This statement is definitely true of rickets both as regards the prenatal and postnatal feeding of the mother, and it probably applies equally to catarrhal conditions of the alimentary tract. It may also explain the variable susceptibility of young animals to catarrhal and inflammatory conditions of the respiratory tract.

The form of the feces as an index of absorption has been generally used by one of us (P. R. H.) to produce deficiency diseases in animals. Extremely incomplete or badly proportioned diets may produce such a severe diarrhea that the animals soon die without well defined changes in the tissues. By observing

4. Burnett, F. L.: Variations of the Intestinal Rate, J. A. M. A. **85**: 1777 (Dec. 5) 1925.
5. McCarrison, Robert: Faulty Food in Relation to Gastro-Intestinal Disorder, J. A. M. A. **78**: 1 (Jan. 7) 1922.
6. Gross, L.: The Effect of Vitamin Deficient Diets on Rats, with Special Reference to the Motor Functions of the Intestine, J. Path. & Bact. **27**: 27 (Jan.) 1924.
7. Wolbach, S. B., and Howe, P. R.: Intercellular Substances in Experimental Scorbutus, Arch. Path. & Lab. Med. **1**: 1 (Jan.) 1926.
8. Veeder, E. B.: The Practice of Medicine in the Tropics, London, Henry Frowde, 1923, p. 2005.
9. Mellenby, E.: Diet and Disease, Brit. M. J. **1**: 515 (March 20) 1926.

the feces, however, the diarrhea may be checked at any time with complete food, and thus it is possible by alternating the incomplete with the complete feeding to bring about the desired deficiency disorder.

MALABSORPTION IN HUMAN DEFICIENCY DISORDERS

A. *Rickets.*—Without generally recognized signs of normal absorption in the form of the feces or the intestinal rate, observations on malabsorption in human deficiency diseases represent only extreme conditions. But in spite of this fact diarrhea and digestive disturbances are frequently referred to.

Experimental and clinical studies on rickets have proved that the disease is due to incomplete or faulty food. The pathogenesis of the disorder, however, is not understood. Howland [10] writes:

> The present evidence is all in favor of the view that defective absorption is the most important factor. . . . With cow's milk the absorption and retention of mineral elements is less than with mother's milk. . . . The absorption of phosphorus is very poor when the fat in the diet is diminished. . . . Normally most of the phosphorus is excreted in the urine, but in rickets the larger part may be excreted by the bowel. . . . The effect on calcium absorption is similar but not so plain because most of this salt is excreted by the intestine.

On the other hand, in a clinical study of 533 patients by Mann,[11] the conclusion is reached that fat deficiency or carbohydrate excess are the predisposing causes in almost half of the rachitic patients. Furthermore, in some of these cases gastro-intestinal disturbances were pronounced for various periods, and sometimes recurrent between three and eighteen months. The symptoms were intolerance for solid food, vomiting, colicky pains and gas, and diarrhea with undigested food and mucus in the stools. A somewhat similar observation has been made by Marfan [12] in which he says that "flatulence, vomiting, and diarrhea with foul stools, may precede the distinctive signs of rickets."

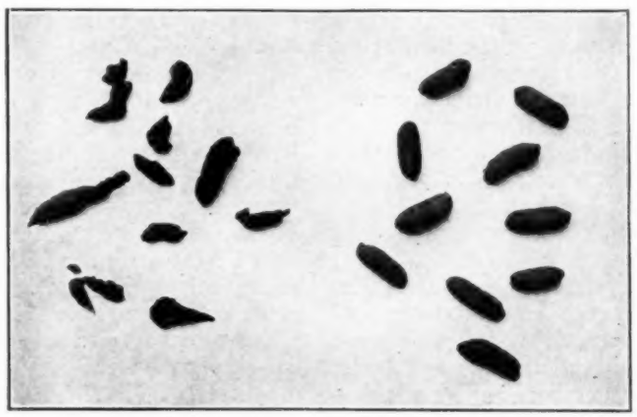


Fig. 2.—The feces of guinea-pigs. On the right are shown the firm, equal and smooth masses of normal absorption, but on the left are the soft and formless feces of intestinal indigestion and malabsorption of animal consuming food without vitamin C.

In the treatment of rickets various measures, as cod liver oil, quartz lamp, reduced food and muscular exercises, have been employed. The most logical, however, appears to be the combined dietetic and medicinal treatment recommended by Jundell,[13] in which the amount of food is somewhat reduced. Rachitic babies are generally overweight, and thus suggest that fat has accumulated at the expense of the normal tissues. By a reduction of food, the colon is apparently made a more useful part of the digestive apparatus and the absorption becomes more nearly normal.

B. *Beriberi.*—The study of human beriberi has not been very comprehensive or detailed, as it generally occurs in the semicivilized regions that are somewhat removed from centers of medical investigation. However, Veeder [14] remarks that:

> The onset is generally insidious. For days or weeks the patient is languid and readily fatigued. . . . At the same time gastro-intestinal disturbances are common and are manifested by loss of appetite, diarrhea or constipation and discomfort after eating, with nausea or even vomiting.

Almost simultaneously with Eijkman's experimental studies that proved beriberi to be of dietary origin, a clinical investigation was being carried on by Wright [15] on the pathology of the disease. In this study he found that alimentary disturbances were the earliest and the commonest; and although he does not specifically mention diarrhea or dysentery in many of the patients, indigestion is frequently referred to. In all the patients he found a gastroduodenitis to precede, by a few hours or days, the determining symptoms of sensory or motor paralysis.

C. *Scurvy.*—Many of the best descriptions of scurvy are found in the records of military campaigns. Napoleon's surgeon general in Egypt, Baron De Larrey [16] writes:

> In the first place, the soldier is distressed, he loses his appetite, the countenance becomes pale, respiration is difficult and the pulse slow and irregular, the bowels become constipated, the urine is secreted in small quantity, and is loaded with earthy matter. The last stage of scurvy presents a most afflicting aspect; to the febrile paroxysms, succeeds a general depression; the ulceration of the gums extends deeply toward the alveoli . . . the teeth become loosened, and are often accompanied with hemorrhage difficult to be arrested. The sphincters of the anus become relaxed, and diarrhea, which often degenerates into a dysenteric and colliquative flux, becomes established. . . . The pulse becomes weaker, wiry, and disappears insensibly. The individual has frequent attacks of syncope. The black spots which were ecchymoses assume the character of a true gangrene. Dropsy appears, the vital functions cease, and the patient slowly expires.

Another description of this deficiency disease is taken from records [17] of the English army in Turkey:

> A detachment of Europeans stationed at Meanday were dieted for several months on fresh beef, in unlimited quantities, biscuit, with the usual allowances of rum and rice, but they were not supplied with fresh vegetables or any substitute for them. At first the men looked robust and healthy, but after a lapse of three months scurvy made its appearance; spongy gums, purple blotches on the extremities, hemorrhagic dysentery and profuse discharges of blood from the stomach and bowels marked the onset of the disease. Lime juice was procured and issued freely and the scurvy rapidly abated.

10. Howland, John: The Etiology and Pathogenesis of Rickets, Medicine **2**: 349 (Nov.) 1923.
11. Mann, H. C.: Rickets, Medical Research Council, Special Report Series 68, p. 192.
12. Marfan, A. B.: Le rachitisme sa pathogenie, Paris, 1911.
13. Jundell, I.: Acta Paediat. **4**: 204, 1925.
14. Veeder, E. B.: The Oxford Medicine, Oxford University Press **4**: 273.
15. Wright, H.: The Classification and Pathology of Beri-Beri, Inst. for M. Research Fed. Malay States, London, John Balc's Sons and Danielson **2**, 1903.
16. De Larrey, quoted by Hammond, W. A.: Report of the Associate Medical Members of the Sanitary Commission on Scurvy, Washington, McGill-Witherow, 1863, pp. 6-9.
17. Crawford, D. R.: Medical and Surgical History of the British Army Which Served in Turkey and the Crimea **2**: 179.

Still another description [18] of scurvy came from the Crimean War:

Scorbutus prevailed under an epidemic form, and was rarely witnessed without being complicated with diarrhea, intermittent and remittent fever, bronchitis, pneumonia, etc. These complications were the most direct causes of the mortality which scurvy produced.

A military surgeon [19] in the United States Army decsribes the disease as follows:

Among the prodromata of scurvy diarrhea is sometimes one of the symptoms. The appetite is usually good and sometimes voracious, but various dyspeptic symptoms may be present. Later constipation is the rule, but diarrhea may occur of a dysenteric type in which the stools consist largely of partially digested food and bloody fluid.

D. *Pellagra.*—Observations in malabsorption in pellagra are somewhat more detailed and extensive. The descriptive phrase of "diarrhea, dermatitis, delirium, and death," applied by Marie [20] to this disease, is singularly appropriate.

A good description of the disease is given by a physician [21] of an asylum. Soon after admission, the patient developed insomnia and severe diarrhea. Ptyalism was noted. Acute exacerbations of the diarrhea occurred, and he became emaciated. In six months the skin on the dorsal surfaces of his feet became a somber brown, suggesting purpura. A month later the purpuric rash involved his hands. The diarrhea persisted and was incorrigible at night, in spite of treatment. Later the limbs became edematous; the diarrhea did not abate; he became exhausted and died.

Malabsorption in pellagrins has frequently been noted by Goldberger and Tanner.[22] In one of their recent studies, the terms "bowels tended to overactivity," "bowels slightly loose," and "some looseness of the bowels" were used in almost all the case histories.

The evidence of malabsorption presented by Denton [23] is somewhat more detailed and conclusive. In this work, detailed histories were obtained and very exact postmortem examinations made of twelve pellagrins. Before admission to the hospital, all the patients had diarrhea, which is described in the following terms: "diarrhea with four or five loose movements daily," "diarrhea and occasional vomiting," "incontinence of urine and feces," "constant diarrhea with streaks of blood in stools," "diarrhea became worse and patient died seven days after admission."

Another description of malabsorption in pellagra is given by Boyd.[24] The alimentary system of the early cases showed definite changes. In forty-five out of a hundred, there were complaints of digestive disturbances in the form of anorexia with burning and flatulence after food, but the most common complaint was of diarrhea, usually of an intermittent type. In advanced cases, the resistance of these subjects is lowered by malnutrition, the secretion of hydrochloric acid in the stomach is diminished or absent, and thus they lose the natural protection against invasion in the alimentary tract, with dysentery as the natural result.

18. Baudens: La Guerre Crimea, etc., Paris, 1858, p. 219.
19. Howard, C. P.: Scurvy, Oxford Medicine, Oxford University Press **4**: 253.
20. Marie, A.: Pellagra, translated by Lavinder and Babcock, Columbia, S. C., the State Company, 1910.
21. Babcock, J. W.: Tr. Nat. As. Study of Pellagra, R. L. Bryan Company, 1914.
22. Goldberger, Joseph; and Tanner, W. J.: A Study of the Treatment and Prevention of Pellagra, Pub. Health Rep. **39**: 87 (Jan. 18) 1924.
23. Denton, J.: The Pathology of Pellagra, Am. J. Trop. Med. **5**: 173 (March) 1925.
24. Boyd, F. D.: J. Roy. Army M. Corps **33**: 513-515 (July-Dec.) 1919.

An increase of protein in the diet of pellagrins is the most reliable measure in the restoration of health. Even Sutton [25] and others, who favor an infectious agent as a causative factor, find that "alimentary disturbances were many, and varied from slight indigestion to severe pyrosis, diarrhea and vomiting," and patients "are given a list of high protein foods and told to model their diet on it." Animal protein, however, that passes through the digestive tract rapidly is not utilized and is still outside the body. The failure of absorption may be due to other food factors. But often when the proportion of protein alone is increased, the stools become better formed and there is a gradual increase in weight as the health improves.[26]

MALABSORPTION IN METABOLIC DISEASES

In the first reference the statement was made that "the term 'deficiency diseases' should embrace disorders also due to faulty and unbalanced food." Here again, from an understanding of the restricted limits of absorption in normal nutrition, the evidence is convincing that faulty and unbalanced food acts somewhat like food without the accessory factors in producing intestinal indigestion, malabsorption and the metabolic diseases. These intestinal disorders common in civilized people are vaguely symptomatic and without signs unless the indexes of normal absorption are observed. In fact, a patient with intestinal indigestion seems to become "conscious that all is not well with him, there is a loss of that feeling of well being that accompanies the healthy state. Disagreeable sensations arise, at first vague but later becoming more definite, and they may become so urgent that he seeks advice. Still no evident sign of disease may be perceived on the most careful examination. By and by the disease, being situated in some organ or tissue, changes the constitution of the part, so that its presence is now recognized by a physical sign, when the clinical methods usually reveal its character. . . . The recognition of disease after it has advanced so far as to have damaged the tissues, a stage which in rare instances does not permit of our attaining one of the chief aims of medicine—cure." [27]

For a long time, many disorders of the body have been supposed to be caused by a transfer of food to the tissues of the body, and have been generally referred to as metabolic diseases. Up to this time, the processes by which nutrient molecules reached the cells have been too complex to understand and adjust. But now, if the digestive tract is thought of as a highly perfected nutritive apparatus, which is so delicately adjusted that many factors have to be regulated and controlled so that the ailment completes its cycle of digestion and absorption, one may at least have a conception of the normal anabolic processes and nutrition. This conception is based entirely on the fact that there is a normal form of the feces and a normal intestinal rate; and these are indexes of normal absorption. The normal feces are formed by the proximal colon, and this peculiar portion of the digestive apparatus is the most difficult to get in action. By the recognition and regulation of this essential mechanism, not only may the early and insidious disorders of intestinal indigestion and metabolism be determined but the continued observation of its action and dietary adjustment are required for normal nutrition. From this point of view, it is imperative for the previously deficient and diseased tissue to receive the

25. Sutton, I. C.: Pellagra, Am. J. M. Sc. **172**: 374 (Sept.) 1926.
26. Goldberger, Joseph: Personal communication to the author.
27. MacKenzie, J.: The Future of Medicine, Oxford Medical Publications, 1919.

products of complete digestion generally in order to maintain its integrity and prevent another attack.

This assertion is based on the fact that relatively little is yet known about normal nutrition; that the treatment of diabetes mellitus, the best studied metabolic disorder, is largely nutritional, as by reducing the amount of food and increasing the protein a more nearly normal action of the colon appears to be brought about and the anabolic processes are improved; and lastly, that in a nutritional study made by one of us [28] of two metabolic diseases of the skin, eczema and psoriasis, intestinal indigestion and malabsorption were invariably caused by eating too fast and too much; eating between meals, consuming too much fat, sweet, highly spiced food, and fruit; or by frequently taking laxatives, oils and enemas.

Intestinal indigestion has always been a vague clinical condition, but when the determining factors are the soft and formless feces and a rapid intestinal rate, the disorder is readily and exactly identified. The patients with eczema or psoriasis who adjusted their ways of eating to the requirements of the normal action of their own complex and delicately adjusted digestive apparatus were relieved of intestinal indigestion after a while and acquired normal absorption, and the skin received the nutrient molecules from the food that were essential for a healthful condition. At this time a few of the patients thought they were cured and again went back to their faulty ways of eating, which led to intestinal indigestion, and new lesions of the skin appeared. From this fact it was evident that the health of some persons had to be controlled to cure eczema and psoriasis. Consequently, most of the patients with these metabolic skin diseases are not only educated to eat according to the action of their own proximal colon in order to acquire normal absorption, but are also requested to return at intervals of a month or two and bring in a health report. The purpose of this report is to keep a check on the action of the nutritive apparatus; it should contain a record of the food, time spent at meals, the time and kind of dejection, and a determination of the intestinal rate during a week. If the feces have been generally normal, the intestinal rate is about sixty-two to 134 hours, the normal weight of the body is maintained, and the skin continues healthy; if not, further dietary adjustments are made. Graphic illustrations of the intestinal rate of some of the patients with intestinal indigestion and malabsorption in the early course of treatment, and later with normal absorption in the control of health, are shown in figure 3. Accordingly, from these facts the only cure of these metabolic skin diseases is the control of health.

In the application of this conception of the anabolic processes, only the metabolic disorders of eczema and psoriasis have been studied and reported. These disorders, however, are sometimes associated with other diseases, as psoriasis with arthritis or iritis, and eczema with asthma. A few patients with two diseases have responded alike to this form of treatment. An independent study of health control after iritis is also being carried on, with results so far as promising as in the treatment of psoriasis. While only a few of the supposedly metabolic diseases have been mentioned, it is possible that in others, too, the only cure is relief of intestinal indigestion and normal absorption in the control of health.

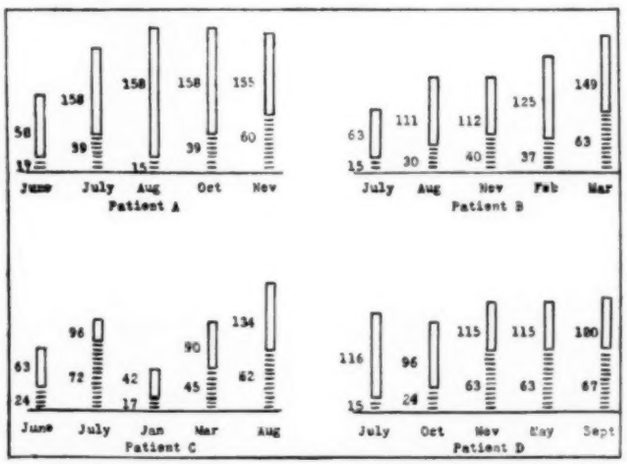


Fig. 3.—Intestinal rates of four patients with skin diseases made by observing the first and last appearance of seeds in the feces in hours after ingestion: At first these patients have a rapid rate, intestinal indigestion and malabsorption, but after a few months of treatment many get their absorption within the presumably normal limits, and then the skin begins to get the nutrient molecules from the food that are essential for maintaining health. Patient C got a healthy skin in November, thought he was cured, and again ate carelessly; during December he had intestinal indigestion, and in January, with extreme malabsorption, new psoriatic spots appeared.

CONCLUSIONS

Deficiency diseases is a term customarily applied to maladies that are caused by the lack of one of the accessory food factors, but this application is too limited. The supposedly specific nature of the vitamins is responsible for this point of view; for while incomplete food will ultimately bring about easily recognized terminal lesions, the early metabolic disorders of intestinal indigestion, malabsorption and diarrhea or constipation have not been generally observed. The oversight is due to a failure to understand and apply indexes of normal absorption; for there is a normal form of the feces and a normal intestinal rate, and these should serve as valuable signs in early and slight deviations of health. An understanding of the restricted limits of normal absorption leads to the recognition of two subtle and vaguely symptomatic types of malabsorption. In one, through a lack of appetite, insufficient food is ingested, and there is an abnormal retention of the intestinal contents. Dejections are infrequent and scanty. In the other, enough food is consumed, but because it is incomplete or faulty it passes too rapidly through the digestive tract. In both types the metabolic disorder is due to the ailment and not to the nutritive apparatus. Both types of malabsorption have been recorded by investigators of the human deficiency diseases of rickets, beriberi, scurvy and pellagra.

If the restricted limits of normal absorption are applied to the metabolic diseases, the faulty food factors of eating too fast and too much, too little food, badly proportioned diets or habitually using physic or enemas act somewhat like food without the accessory substances, in producing intestinal indigestion and malabsorption. By the recognition of a normal form of the feces, a normal intestinal rate and a normal body weight, early and slight functional disorders of anabolism can be observed and treated, and an improved state of well being maintained. Without applying these indexes of normal absorption, however, the failure in the transfer of nutrient molecules to the body may continue for years before the factors of safety in the weakest tissue are exhausted and the readily recognized and destructive changes of a definite disease are apparent.

28. Burnett, F. L.: Intestinal Indigestion in Eczema and Psoriasis, Am. J. M. Sc. **165**: 415 (Sept.) 1923.

HYPERMOBILITY OF JOINTS AS A SEX LINKED HEREDITARY CHARACTERISTIC*

J. ALBERT KEY, M.D.
ST. LOUIS

This is a report of what might be termed a "double jointed" family, in which the abnormal mobility of the joints is present in all the male members and is absent in all the females.

Other than an occasional brief description of a contortionist in some of the older medical journals, I have not found hypermobility of otherwise normal joints mentioned in the literature.

The term hypermobility of joints suggests the question, What is the normal range of motion in the various joints? An answer to that question presents many difficulties and will not be attempted in this paper. It can be stated, however, that there may be considerable differences in the range of motion in the corresponding normal joints of different individuals, and that, as a rule, the joints of slender persons can be moved through wider arcs than can the corresponding joints of persons of the heavy type. Also the range of motion

Fig. 1 (cases 1 and 2).—Two brothers on admission.

in the joints tends to decrease slightly with advancing years.

In addition to the variations mentioned, there are certain individuals, more often females, whose joints can be moved through wider arcs than normal. This is especially noticeable in the knee, elbow and finger joints, which can be hyperextended to an unusual degree. These persons are not to be regarded as abnormal but merely as normal individuals with certain anatomic characteristics that are unusual. Whether or not this slight increase above the usual range of motion in joints is hereditary has not been determined, but I have occasionally noted it in different members of the same family.

Definite abnormal mobility of joints not the seat of disease or injury, which is not due to paralysis of the

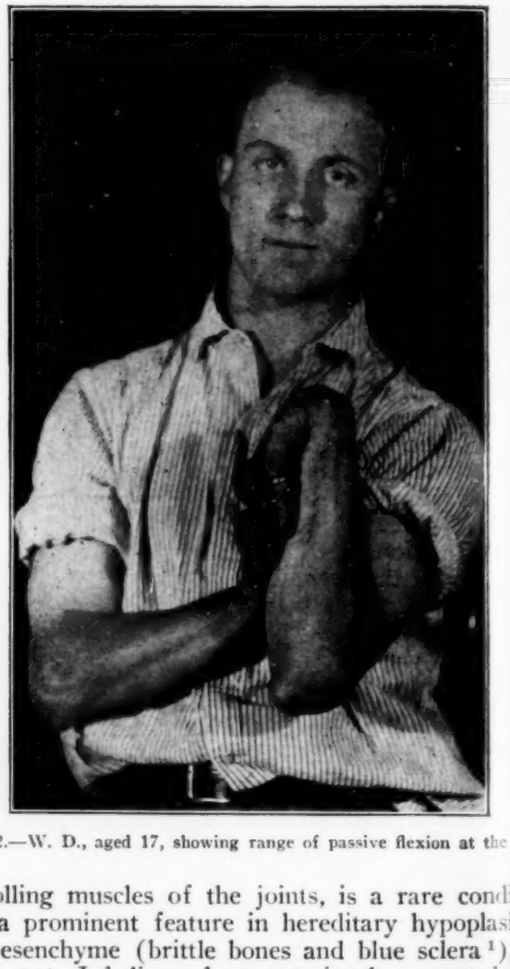


Fig. 2.—W. D., aged 17, showing range of passive flexion at the wrist.

controlling muscles of the joints, is a rare condition. It is a prominent feature in hereditary hypoplasia of the mesenchyme (brittle bones and blue sclera [1]), but it has not, I believe, been previously reported in a family or even in individuals in whom the other mesenchyme derivatives were apparently normal.

In September, 1924, two brothers were admitted to the Shriners' Hospital for treatment of bilateral clubfoot (fig. 1). It was also noted that in both patients the range of motion in the joints was definitely greater than is normal.

REPORT OF CASES

CASE 1.—V. D., a boy, aged 4, admitted, July 15, 1924, had bilateral clubfoot and was double jointed. The father was living and well; the mother had died of pneumonia. Three brothers and five sisters were living and well. Two of the brothers had bilateral clubfoot and the other brother had congenital talipes equinus. The father and all three brothers were double jointed. The five sisters were all normal. The father had nine brothers and one sister, and all were normal. The maternal and paternal grandparents were normal.

The personal history was negative. The deformities of the feet were present at birth. There had been no treatment. The abnormal mobility of the joints was also noted at an early age.

* From the Shriners' Hospital for Crippled Children and the Department of Surgery, Washington University School of Medicine, St. Louis.

1. Key, J. A.: Brittle Bones and Blue Sclera (Hereditary Hypoplasia of the Mesenchyme), Arch. Surg. **13**: 523-568 (Oct.) 1926.

Physical examination showed bilateral equinovarus (fig. 1). The feet were quite rigid, and the deformities did not lend themselves to correction. Other than the joints of the feet which were involved in the deformities (ankle and tarsal joints), there was definite hypermobility of practically all joints of the body. The toes could be hyperextended until they touched the dorsum of the foot, and there was an abnormal amount of motion in the tarsometatarsal joints. The knees could be hyperextended 15 degrees and there was an unusual amount of lateral mobility. The hips could be abducted to 90 degrees and, with the knee straight, flexed until the leg lay flat on the chest. The spine was unusually mobile and the joints of the upper extremities resembled those of the lower in the wide range of motion permitted. The shoulders were very loose and the elbows could be hyperextended about 20 degrees. The wrist was very loose and the fingers could be hyperextended until they touched the dorsum of the wrist.

In spite of the wide ranges of motion in the joints, there was no tendency to dislocation of any joint, nor could dislocations be produced by the manipulations that were permitted.

The blood and urine were normal, and the Wassermann reaction was negative.

Other than the deformities usual with this degree and type of clubfoot, the roentgenogram did not show anything abnormal.

CASE 2.—In F. D., a boy, aged 6, the history and physical examination were practicaly identical with those of the brother as described above and need not be repeated.

An older brother, W. D., aged 18 years, who came in for examination, Sept. 23, 1925, presented bilateral equinus with moderate clawfoot deformity. Dorsiflexion of the right ankle was limited to 80 degrees, and of the left ankle to 70 degrees. In practically all the other joints there were present the same abnormal ranges of motion as were noted in case 1. Figures 2, 3 and 4 illustrate the range of motion in the hand and wrist.

The father was a rather short heavy man, aged 50. He stated that when he was a young man his joints were fully as loose as those of the sons, but that with advancing years the hypermobility of the joints had gradually decreased. However, on physical examination, his joints were found to

Fig. 3.—Passive hyperextension of the fingers.

possess a much wider range of movement than do the joints of normal individuals, and this in spite of the fact that the knees, spine and hands showed evidence of a moderate degree of hypertrophic arthritis. In all these persons the knuckles and interphalangeal joints were unusually large and prominent.

COMMENT

In this family there was a condition of hypermobility of the joints which appeared in the father and was not present in his parents, in any of his nine brothers or in his sister. It was transmitted by the father to all four of his sons but not to any of his daughters. It thus acts as a sex linked character.

It is to be noted that while the father's feet were normal, except for the hypermobility of the joints, all four of the male children were born with bilateral deformities of the feet (three with talipes equinovarus and one with talipes equinus), but the five female children were normal. It thus appears that the clubfoot

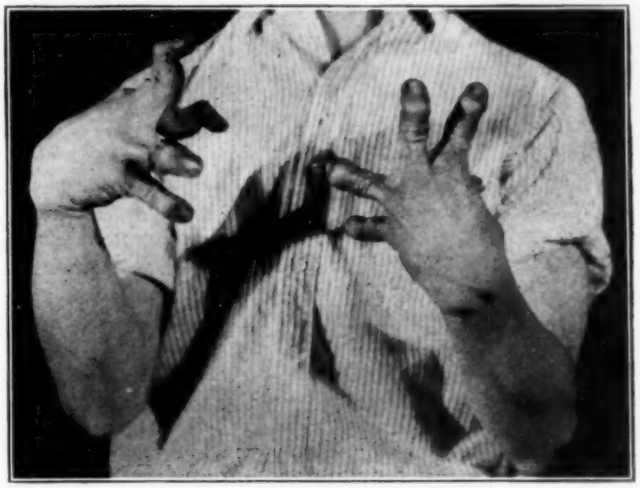


Fig. 4.—Active hyperextension at the first interphalangeal joints.

in this family was due to an abnormality in the germ plasm which is limited to the males. It is known that clubfoot is about twice as frequent in males as it is in females, and that in a small percentage of the cases it is hereditary, but I do not know of any other instance in which, in a large family, all the male children were affected and all the female children were free from the deformity.

From the standpoint of treatment, the occurrence of hypermobility of the joints in a case of clubfoot is of considerable importance, as it makes the treatment more difficult. These two boys were treated in the usual manner by wrenching, plantar fasciotomy, tenotomies and corrective plasters. Fair correction of the varus was obtained, but in correcting the equinus the feet gave at the midtarsal joint and the forefoot tended to dorsiflex on the heel, thus producing a rocker foot deformity. This I have attempted to correct by putting a pin over the top of the os calcis behind and pulling it down with a lever which presses upward on the sole at the calcaneocuboid joint. Some correction was obtained and the boys are now walking without braces (fig. 5), but in one foot of patient 1 further operative treatment will probably be necessary before adequate correction of the deformity can be obtained. There is also a tendency of the toes to assume abnormal positions with weight bearing and the fifth toes of patient 1 are subluxated.

The mild degree of hypertrophic arthritis present in the father can hardly be considered as being due to the hypermobility of the joints, because he is of the heavy type that very frequently develops this form of arthritis in late adult life.

The hypermobility of the joints present in the males of this family is to be distinguished from that present in the hereditary hypoplasia of the mesenchyme, which is characterized by brittle bones and blue sclerae. In that condition, which is transmitted as a dominant

hereditary character, the joints are weak because of some developmental defect in the white fibrous tissue and the bones are brittle, partly because of the defective fibrous matrix and partly because the cortex contains a large number of wide canals.[1] In this condition of inherited hypermobility the ligaments are lax, but they appear to be very strong and there is no blueness of the sclera, while the bones are unusually heavy and dense.

The affected members of this family do not regard themselves as handicapped in any way by the condition, but are rather pleased with the fact that they are, as they say, "double jointed." In the older brother, W. D., the patellar ligaments on both sides are unusually long and he has suffered several dislocations of the patella. The dislocations have always been easily reduced and he does not wish operations to prevent recurrence of the dislocations. As there have been no other dislocations in any of the five affected members, there is no indication for treatment of the condition.

CONCLUSIONS

1. General hypermobility of the joints may occur as a congenital abnormality.

Fig. 5 (cases 1 and 2).—Feet of the two brothers one year after discharge from the hospital, showing tendency of the toes to assume abnormal positions with weight bearing.

2. The condition appeared spontaneously in the father and was transmitted to all the sons but not to any of the daughters.

3. In the second generation of this family, the condition was associated with congenital deformities of the feet.

The Existence of Preformed Bonds.—Any man possesses at the very start of his life—that is, at the moment when the ovum and spermatozoon which are to produce him have united—numerous well defined tendencies to future behavior. Between the situations which he will meet and the responses which he will make to them, preformed bonds exist. It is already determined by the constitution of these two germs that under certain circumstances he will see and hear and feel and act in certain ways. His intellect and morals, as well as his bodily organs and movements, are in part the consequence of the nature of the embryo in the first moment of its life. What a man is and does throughout life is a result of whatever constitution he has at the start and of all the forces that act on it before and after birth.—Thorndike: Educational Psychology, p. 2.

Clinical Notes, Suggestions and New Instruments

ANEURYSM OF THE INTERNAL CAROTID ARTERY

VILHELM MAGNUS, M.D., OSLO, NORWAY

In a report of two cases of lesions of the paratrigeminal region, Davis[1] says: "These patients offer a real differential diagnostic problem because surgical measures directed toward the fifth cranial nerve usually offer no relief." This assertion has not been proved by the cases that have been published, as in the first case only an alcoholic injection was made in the ophthalmic and the maxillary branch at the peripheral foramina, and later a deep injection was made in the maxillary branch; a radical operation was not performed. In a case comparable to Davis' second case, I have had good results from avulsion of the trigeminal root, and the patient was completely relieved of his pain.

REPORT OF CASE

Caretaker A. H., aged 69, consulted me, March 23, 1924, because of pain in the crown of the head, which radiated down the right part of the forehead, the right eye and the right side of the nose toward the right ear and down the right lower jaw. The pain had begun three months before; it was constantly increasing and never stopped for a moment, preventing the patient from sleeping at night. Sometimes the pain became unbearable and was described as a burning sensation. The patient could not stand to have his beard touched, and when washing he was obliged to exercise the greatest care. He was able to chew solid food without the pain increasing very much. The pain was relieved when he put a handkerchief over his face and breathed inside it so that the air became heated.

As shown in the accompanying illustration, the right palpebral fissure was much narrower than the left; the right eye was directed inward and moved only a little upward and downward, and the right pupil was much smaller than the left one. Both eyes reacted to light, and after the injection of a 5 per cent cocaine solution the left pupil but not the right became dilated; the right corneal reflex was extinguished. H. Lystad, the oculist who examined the patient, reported only a paralysis of the right nervus abducens and sympathicus. On account of the strong inward rotation of the right eye, it was impossible to estimate the intra-ocular pressure. For the same reason it was impossible to determine whether there was a trochlearis paralysis, an oculomotorius paralysis being absolutely out of the question. Besides this condition, there was hypesthesia throughout the right half side of the face. There was no involvement of the other cranial nerves.

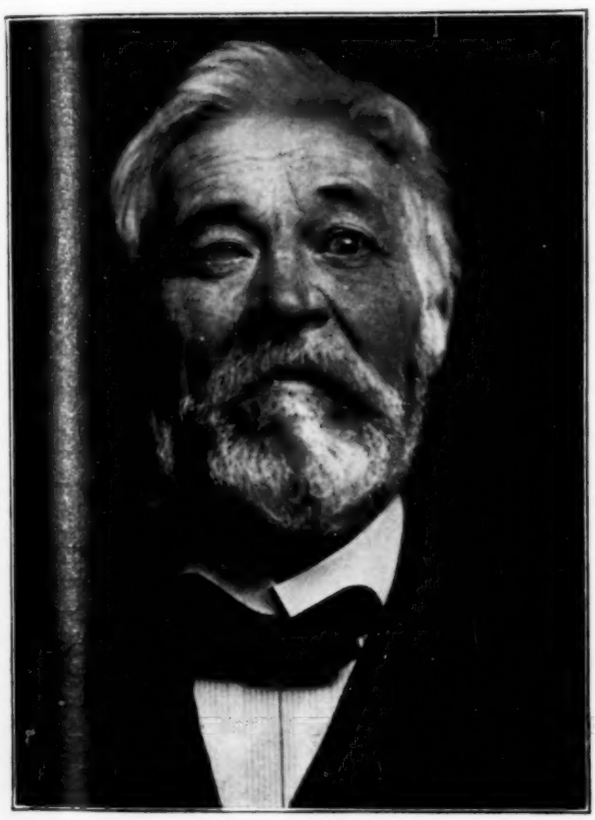
The patient was somewhat dull; his understanding was slow, and he looked considerably older than he was. The temporal arteries were greatly tortuous, these as well as the radial arteries being hard and knotted. The Wassermann reaction of the blood was negative, and further examination revealed normal conditions. As the patient's arteries were extremely sclerotic I ausculted the skull, but a murmur was not heard. Six years before, the patient had been treated for a right abducens paralysis in the ophthalmic department of the Rikshospitalet.

Briefly, the patient's condition was a trigeminus involvement of the right side, besides a paralysis of the sympathicus fibers which innervate the right orbit and an abducens paralysis on the same side. I made the diagnosis of a slowly growing tumor in the trigeminal region, which first compressed the nervus abducens and then the gasserian ganglion.

As the patient's condition was unbearable, I performed an operation, April 8, in order to remove the trigeminus root. When the dura mater was detached, the middle meningeal

1. Davis, L. E.: Lesions of the Paratrigeminal Area, J. A. M. A. **80:** 380 (Feb. 10) 1923.

artery was lacerated down on the base of the cranium, and as it was very difficult to ligate so far down, the external carotid artery was ligated on the neck. As the dura mater was detached from the base of the cranium, I came on a tumor about the size of a chestnut with a smooth surface and glistening like mother of pearl, strictly limited and situated on the surface of the gasserian ganglion. During the further attempts at detaching the dura mater from the surface of the tumor in its medial part, a hole was torn and the contents of the tumor poured out; they were yellowish brown, and came out in portions. About half was easily emptied with a spatula; while the rest was being enucleated, a great gush of blood that could not be stopped by tamponade poured out. The internal carotid artery was now ligated, and the bleeding stopped. The contents of the tumor could now be emptied without difficulty and the lateral wall, which was as thin as paper, extirpated. I dared not remove the medial wall for fear of injuring the sinus cavernosus. Afterward the trigeminus root was removed.



Patient with aneurysm of internal carotid artery.

The patient stood the operation very well, the pulse never dropping below 74. He was not anemic after the operation, the loss of blood not having been very great, thanks to the comparatively rapid ligation of the internal carotid artery. The blood pressure was 165. In the afternoon the patient felt very comfortable, and said that I could not have given him a better birthday present, as he had completed his sixty-ninth year that day.

Three days later he complained of the left hand being paralyzed; he could move his fingers just a little and could hardly dorsiflect the hand, although the strength of the upper arm was satisfactory. It should be particularly noticed that the Babinski toe and the abdominal reflexes were equally strong on the left and on the right side. The sutures were removed the fifth day after operation, and three days later he was allowed to get up. April 23, he was discharged. At that time the ptosis and the position of the eyes were unchanged, and there was a total anesthesia in the right trigeminus region. He was absolutely free from pain, the paralysis in the left hand being the same.

COMMENT

The microscopic diagnosis of the contents of the tumor was blood coagulation. Doubtless the tumor had been an aneurysmal enlargement of the internal carotid artery in its course inside the sinus cavernosus, which had first pressed on the nervous abducens and then on the sympathetic fibers which pass from the carotid arteries to the gasserian ganglion. The coagulation of the blood indicated that there had been a tendency to repair the failing artery walls, but it is hardly probable that the cure would have been permanent. The aneurysm had constantly enlarged laterally, and by its pressure on the surface of the gasserian ganglion it had caused trigeminus neuralgia. It is supposed that the aneurysm would have burst within a comparatively short time and killed the patient. In the accessible literature I have found two parallel cases of aneurysm of the internal carotid artery, one having been described by Davis and the other by Hutchinson.

My particular case shows that much can be done for patients suffering from this complaint, if only the practitioner who has the case adopts a similar treatment. Doubtless the mortality after ligation of the internal carotid artery is rather great; but if nothing is done, certain death will be the fate of the patient.

Uranienborgveien 9.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED AS CONFORMING TO THE RULES OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR ADMISSION TO NEW AND NONOFFICIAL REMEDIES. A COPY OF THE RULES ON WHICH THE COUNCIL BASES ITS ACTION WILL BE SENT ON APPLICATION.

W. A. PUCKNER, SECRETARY.

EPHEDRINE HYDROCHLORIDE-SWAN-MYERS (See THE JOURNAL, April 16, 1927, p. 1235).

The following dosage forms have been accepted:

Ampoules Ephedrine Hydrochloride-Swan-Myers, 0.05 Gm., 1 cc.
Capsules Ephedrine Hydrochloride-Swan-Myers, 0.025 Gm.
Solution Ephedrine Hydrochloride-Swan-Myers, 3%: It is preserved with chlorbutanol, 0.5 per cent.

OVARIAN HORMONE-SQUIBB. — A sterile, aqueous solution representing the physiologically active principle of the whole ovary. It is standardized in terms of its effect on spayed albino rats, one rat unit being the quantity necessary to induce estrus as judged by the smear method within three days in an ovariectomized, sexually mature rat weighing approximately 140 Gm.

Actions and Uses.—See Ovary, New and Nonofficial Remedies, 1927, p. 272.

Dosage. — Ovarian hormone-Squibb is administered by hypodermic injection. For recent cases of amenorrhea, artificial or natural menopause, from 50 to 100 units is given in a series of injections over a period of from three to five days, an attempt being made, if possible, to time these injections so that the last one shall be given from one to five days before the calculated expected menstruation. For long existing cases of amenorrhea, artificial or natural menopause, much larger doses may be administered; from 250 to 400 units may be given in a series of injections over a period of from five to ten days. If menstruation is not established, another course may be administered after an interval of ten days.

Manufactured by E. R. Squibb & Sons, New York. No U. S. patent or trademark.

Ovarian Hormone-Suibb, 50 units, 5 cc.: each cubic centimeter represents 10 units.

Ovarian hormone-Squibb is prepared from fresh ovaries of the sow by macerating and extracting with alcohol and concentrating the extract. A series of fractionations are made with acetone and ether to remove the proteins, cholesterol and phospholipins. The extract is dissolved in distilled water containing sodium chloride, assayed by the method of Allen and Doisy (*Am. J. Anat.* **34**: 133, 1924) to determine its strength in rat units and adjusted to the desired strength and to an acidity of *p*H 5.5.

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SATURDAY, MAY 28, 1927

PRECIPITATION TESTS IN THE DIAGNOSIS OF SYPHILIS

Since the development of the Wassermann test, almost yearly announcements of precipitation tests for syphilis have ensued. Only recently, however, have such methods begun to attract wide attention. The medical world apparently has insisted on giving the Wassermann test a thorough trial before turning to simpler methods. Now that the value and especially the limitations of the Wassermann test have been established, clinicians are turning to precipitation tests and asking whether any of them have superior features.

Twenty years ago, when it was believed that the Wassermann test was a specific immunologic reaction, Fornet and Schereschewsky [1] immunized rabbits with an extract of syphilitic liver containing *Spirochaeta pallida* and observed that the serum of these rabbits contained specific precipitins. This observation led them to believe that in old cases of syphilis, such as general paralysis, immune bodies in the form of precipitins might be present in the patient's blood. They believed, further, that in secondary and other active stages of syphilis the patient's blood might contain spirochetes or their end-products and might possess antigenic properties in the form of precipitinogen. Therefore, serum from a patient with secondary syphilis added to the serum from a patient with general paralysis would show a precipitate. They asserted that they had observed this, although their work did not lead to the evolvement of a practical precipitation method. Michaelis soon showed that it was possible to obtain a precipitate by mixing syphilitic serum with a watery extract of syphilitic liver. Porges and Meier demonstrated that a precipitate could be obtained by adding lecithin suspensions to syphilitic serum. Jacobstahl followed with a precipitation method in which an alcoholic extract of syphilitic liver was used as antigen and the precipitates were observed by means of dark-field illumination. Bruck and Hidaka, in turn, showed that it was not necessary to resort to the microscope. By modifying Jacobstahl's procedure it was possible to see precipitates with the unaided eye. It is significant that the last-named workers stated that their studies were not intended to bring forth a method for the serum diagnosis of syphilis; only theoretical interest prompted them, since the Wassermann test was available for diagnostic purposes.

In 1915, Hecht announced a precipitation test in which an alcoholic extract of heart muscle was used as antigen. By this time it was well established that the Wassermann test was not a specific immunologic reaction and that alcoholic extracts of normal heart tissue served well as antigen. In 1917, Meinicke reported "water" and "salt solution" precipitation methods. These were short lived and were soon replaced by his "third modification," which employed as antigen an extract of horse heart. This modification attracted some interest for several years, especially in Germany. In 1922, following Dold's report of a turbidity reaction for syphilis, Meinicke reported a reaction of this type in which syphilitic serum became turbid after incubation with a special cholesterolized antigen containing balsam. This he followed in 1923 by a turbidity test based on a balsam-containing antigen but cholesterol free. More recently Meinicke announced a microreaction. The original Sachs-Georgi reaction employed as an antigen a cholesterolized alcoholic extract of beef heart and was announced in 1918. This reaction was generally accepted to have similar diagnostic value to the "third modification" of Meinicke. Both reactions required an incubation period of forty-eight hours before obtaining the final results. Sachs and Klopstock have since proposed a method that is more rapid than the Sachs-Georgi test and is based on the addition of mastic to the tissue extract antigen. Vernes developed a precipitation procedure in which syphilitic serum is used with a special reagent, "perethynol," which is prepared from horse heart. This procedure requires several delicately adjusted apparatus devised by Vernes. Dryer and Ward proposed a precipitation reaction in which calf-heart antigen is employed. Additional reactions have been announced by Hecht, Bruck, Wang and others.

During the past few years the Kahn test has aroused much interest. In this test, a cholesterolized alcoholic extract of beef heart is employed as antigen. According to Kahn, the test is based on certain fundamental factors that govern the phenomenon of precipitation with syphilitic serum. These have already been referred to in these columns.[2] He emphasizes the necessity for concentration of the ingredients that make up the test, the use of a mixture of antigen and physiologic sodium chloride solution which is highly unstable, the need for correct quantitative relationship

1. This and subsequent references are cited by Bruck, C.: Serodiagnose der Syphilis, Berlin, Julius Springer, 1924, and by Kahn, R. L.: Serum Diagnosis of Syphilis by Precipitation, Baltimore, Williams and Wilkins Company, 1925.

2. The Kahn Reaction in the Diagnosis of Syphilis, Current Comment, J. A. M. A. **87**: 1921 (Dec. 4) 1926.

between serum and antigen, and the importance of shaking the serum-antigen mixture for a definite period. Aside from its apparent specificity and uniformity of results, the Kahn test possesses the advantage of being completed within a few minutes after the ingredients have been mixed. The completion of the test from the time blood is drawn from the patient requires less than one hour. This is of practical importance, since it enables physicians to obtain early laboratory reports in emergency cases, such as in blood transfusion and in surgical cases. Furthermore, the technic of the test is such that it can be used with accuracy in the tropics and other parts of the world removed from medical centers. Several procedures extend the applicability of the test. In addition to the routine diagnostic test with serum there is a spinal fluid procedure, a presumptive or check procedure, and a quantitative method. This last procedure gives the number of syphilitic reacting substances in the blood of patients and is of particular value in following the serologic effect of treatment.

The search for a precipitation test for syphilis which has been carried on more or less steadily since the development of the Wassermann test is not difficult to understand. A precipitation test requires only two reagents and its technic is comparatively simple, while the Wassermann test requires five reagents and its technic is highly complicated. The fact that many precipitation tests have been proposed which have not proved successful in the laboratory diagnosis of syphilis may perhaps delay the acceptance of any precipitation test, even if it is superior. This delay, however, cannot be indefinite, and any simpler test that is reliable will ultimately replace the more cumbersome Wassermann method.

INTESTINAL ABSORPTION IN RICKETS

The defective calcification of the bones that is characteristic of rickets is associated with a diminished concentration of the inorganic phosphorus or the calcium of the serum. Certain cases show only a low inorganic phosphorus content, and this is the rule in uncomplicated rickets; other cases show only a low concentration of calcium, the condition usually found when rickets is complicated by tetany; while still others may be associated with diminished concentrations of both these elements. It has furthermore been demonstrated that these low concentrations of calcium and phosphorus are found only in the active stage of the disease, and that when rickets heals, either spontaneously or as the result of treatment, the values return to normal. Early in the investigation of the conditions that may be responsible for the abnormalities in the metabolism of these inorganic elements in the body it was suggested, among other explanations, that some difficulty might lie in their absorption. On this basis the improvement in the condition of the bones when antirachitic measures are instituted might be attributable to an increased absorption of calcium and phosphorus from the intestine. This is by no means the only possibility that can account for the remedial effect; a decreased excretion of the effective elements is also conceivable as tending to promote the same beneficial result. Four years ago Orr, Holt, Wilkins and Boone [1] of the Johns Hopkins Hospital argued, on the basis of balance studies in infants, in favor of the hypothesis of improved absorption. In their own words, the primary difficulty, as yet unexplained, in the rachitic disturbance is a defect in the capacity of the intestine to absorb calcium and phosphorus. The low concentrations of these elements in the serum and the defective calcification ensuing are the direct results of this condition. When treatment is instituted, either with cod liver oil or with ultraviolet rays, although no change is made in the calcium and phosphorus of the diet, absorption of these elements from the intestine occurs much more readily. Their concentration in the blood serum rises until the deposition of calcium phosphate in the bones becomes possible.

From a chemical standpoint it is obvious that the reaction of the intestinal contents must be of importance in determining the ease of absorption of the compounds of calcium and phosphorus. They tend to be more insoluble in alkaline mediums. On "normal" diets the hydrogen ion concentration of the contents of the digestive tract tend to remain on the acid side, though there are variations in the degree at various levels of the bowel. Increased alkalinity would tend to promote the formation of insoluble calcium phosphate. Observations made on rats, one of the species most widely employed in the classic studies of rickets, have shown that when these animals are placed on a rachitic regimen a marked fecal alkalinity develops.[2] This alkalinity is not affected by administration of certain nonrachitic substances; but the fecal p_H can be reduced to the acid side of neutrality by various antirachitic measures.

Investigations by Grayzel and Miller [3] at the Columbia University College of Physicians and Surgeons have thrown light on the reaction of the contents of the gastro-intestinal tract at various levels in dogs kept on diets of varied character. The normal diet showed acidity throughout the tract, with considerable constancy at each level. High fat, protein or carbohydrate variations did not cause notable changes, the results falling within the normal ranges. The rickets-producing diet caused a definite rise in the p_H of the contents of the intestines, even to alkalinity. Ultraviolet irradiation or cod liver oil administration (both of which are known to be cura-

1. Orr, W. J.; Holt, L. E., Jr.; Wilkins, Lawson; and Boone, F. H.: The Calcium and Phosphorus Metabolism in Rickets, with Special Reference to Ultraviolet Ray Therapy, Am. J. Dis. Child. **26**: 362 (Oct.) 1923.

2. Abrahamson, E., and Miller, E. G., Jr.: Proc. Soc. Exper. Biol. & Med. **22**: 438, 1925. Jephcott, H., and Bacharach, A. L.: Biochem. J. **20**: 1350, 1926.

3. Grayzel, D. M., and Miller, E. G., Jr.: p_H Concentration of Intestinal Contents of Dog, with Special Reference to Inorganic Metabolism, Proc. Soc. Exper. Biol. & Med. **24**: 668 (April) 1927.

tive or preventive for rickets) to dogs on the same diet caused an acidification of the intestinal contents to the normal range. The gastric contents did not show changes. The New York biochemists argue that their experiments add further evidence for the view that the primary defect in rickets is an impairment of absorption. As they point out, the p_H of the intestinal contents, with the consequent effect on the solubility of phosphate (and also of calcium, magnesium and iron) offers a mechanism whereby the effect of such agents as light and cod liver oil may be linked with the inorganic metabolism.

THE WASHINGTON SESSION

Already the Washington Session of the American Medical Association is history—but glorious history. Never before in the history of the Association has there been such complete recognition of the outstanding leadership in medical science of the American Medical Association—a position that has been won by years of whole-hearted striving for the good of the American public. From the opening session of the House of Delegates on Monday, May 16, to the reading of the last paper in the last scientific session on Friday, May 20, the attention of the scientific world pointed toward Washington. The session was, moreover, resplendent with the official panoply available only in the Capital City of the nation.

A registered attendance of 6,273 means the coming of at least 10,000 guests into the convention city. Not one complaint was heard of the nature of the hotel accommodations; representatives of the scientific sections were enthusiastic in their praise of the qualities of the section meeting halls; exhibitors in the technical exhibits vied with one another in enthusiasm for the places that had been granted to them, and the Scientific Exhibit reached a pinnacle of display beyond even the wildest dreams of the Committee on Scientific Exhibit, which has tenderly nursed this portion of the meeting from an infant weakling to its present high estate.

On Tuesday night, May 17, the President of the United States, Calvin Coolidge, conferred on the American Medical Association, as the representative of scientific medicine in this country, high praise for its contribution to American medicine. More than 6,000 persons taxed the capacity of the auditorium in which the meeting was held, and some 5,000 persons crowded the adjacent streets vainly seeking admission. The address in toto appeared in most of the leading newspapers of the United States. On Wednesday afternoon, the President of the United States, with the distinguished lady who adorns her notable position, greeted several thousand physicians, in spite of most inclement weather, on the White House lawn. On Thursday night, a noteworthy ceremony in the Mayflower Hotel was the annual reception to the President of the American Medical Association. Meanwhile, the physicians of Washington, every department of the national government, including particularly the Army and Navy medical departments, the U. S. Public Health Service and the many medical bureaus of the Department of the Interior, assembled exhibitions for the visiting guests.

Nowhere except in Washington could there be presented such a meeting as that which has just been held. Washington, as the seat of the nation's government, holds representatives of all the great press associations and special representatives of most of the important newspapers of the United States. That section of the Association which has to do with newspaper publicity was able to convey to these representatives authoritative information concerning not only the official action of the House of Delegates but also the work of the scientific sections. Thousands of press clippings already coming into the headquarters office indicate that the accomplishments of the Washington Session have been adequately reflected to the entire American people—indeed, to all the world.

The Local Committee of Arrangements, the officers of the American Medical Association, and every one who had any part in making the Washington Session what it was, deserve the highest appreciation of the members of the greatest medical association in the world.

INSENSIBLE PERSPIRATION IN CHILDREN

There are evidences that insensible losses from the body were recognized as early as the days of Hippocrates and Galen. Such losses, often designated as insensible perspiration, are represented by those gaseous emanations from the body which do not appear in the form of sensible moisture or sweat; in other words, the insensible, invisible, intangible but weighable gaseous and vapor productions arising from the lungs in the process of exhalation and from the skin by due process of vaporization. Students of physiology are familiar with the picture of Sanctorius and his ingenious steelyard wherewith as early as 1614 he made measurements of his own loss of weight attributable to what he termed "perspiratio insensibilis." Modern studies of the gaseous emanations from the lungs and skin of man indicate that they consist chiefly of carbon dioxide and water vapor, the amount of marsh gas produced in this species being negligible. Benedict and Root [1] have pointed out that in view of the comparatively small portion of the loss represented by the carbonaceous components it is justifiable, broadly speaking, to identify the insensible loss for the most part with water vaporized from the body.

From a physiologic standpoint the insensible losses from the body represent a mode of elimination of certain products of metabolism: end-products of the oxidation of carbon and hydrogen as well as waste heat generated in the organism. The refined yet sim-

1. Benedict, F. G., and Root, H. F.: Insensible Perspiration: Its Relation to Human Physiology and Pathology, Arch. Int. Med. 38:1 (July) 1926.

ple methods introduced by Benedict and Root for measuring losses of weight due solely to insensible perspiration have brought out sharply the influence of body size, ingestion of food and exercise on the insensible loss. Since these factors likewise affect the metabolism, Benedict and Root regard it as evident that there is a relationship between the insensible loss and the metabolism. Patients with diseases of the thyroid, whose metabolism is high, were found to have a large insensible loss; and diabetic patients, whose metabolism is low, were found to have a small loss. The relationship between the insensible perspiration and the metabolism of these two types of pathologic cases was such that when the data for the hourly insensible perspiration were plotted with reference to the twenty-four hour heat production, a straight line indicated the general trend of the metabolism. Consequently it has been suggested that measurement of insensible loss from the body may make possible an approximation of the metabolism when, for practical reasons, the ordinary methods of determining the metabolism may not be employed.

The significance of this conclusion has recently been substantiated by the studies of Levine and Wilson[2] on children at the Cornell University Medical College. The importance of their observations is accentuated by the well known fact that the metabolism of childhood is demonstrably accelerated in comparison with that of adult life; and furthermore, the "water balance" of the youthful organism seems to be particularly susceptible to profound disturbance. The results of Levine and Wilson indicate that healthy children and most sick children (afebrile), as well as adults, eliminate approximately 25 per cent of the total heat produced in vaporization through skin and lungs, and the remaining 75 per cent by way of radiation and conduction. The close relation between insensible perspiration and metabolism previously found to exist in adults may be extended to children.

2. Levine, S. Z., and Wilson, J. R.: Respiratory Metabolism in Infancy and in Childhood: IV. Elimination of Water Through the Skin and Respiratory Passages, Am. J. Dis. Child. 33: 204 (Feb.) 1927.

Current Comment

WILLIAM SYDNEY THAYER, PRESIDENT-ELECT

The election to the presidency of the American Medical Association of Dr. William Sydney Thayer is a recognition of outstanding achievement in medical science and the conferring of the highest honor in the hands of the House of Delegates of the American Medical Association on one whose leadership has already been recognized both in this country and abroad. Dr. Thayer was born in Milton, Mass., June 23, 1864, the son of James Bradley and Sophia Bradford (Ripley) Thayer. After an elementary education in a private school in Milton he attended the Cambridge high school, and later Harvard University, from which he received his A.B. degree in 1885, and his M.D. in 1889. A period of postgraduate study in Berlin and Vienna from 1889 to 1890 followed an internship in the Massachusetts General Hospital. He began at once as a general practitioner in Boston, but in 1890 was called to the Johns Hopkins Hospital as a resident physician, which position he held until 1898. He succeeded to the position of attending physician and head of the medical department of the dispensary from 1898 to 1906, at the same time serving as associate professor in medicine in the Johns Hopkins University. He became professor of clinical medicine in 1900, holding this position until 1918, and acted as professor of medicine from 1918 to 1921. At that time he became emeritus professor in the university, serving also as visiting physician to the hospital and consulting physician to many other Baltimore institutions. During the World War Dr. Thayer was a major in the medical section of the Officers' Reserve, assigned to active duty in 1918, serving subsequently as Director of General Medicine in the A. E. F., Chief Consultant in Medicine, and achieving finally the rank of Brigadier General. From the first, Dr. Thayer has been conspicuous for organizational and research ability. His contributions to the etiology of malaria have received wide recognition, and perhaps the training with Thayer in the laboratories of Johns Hopkins University

WILLIAM SYDNEY THAYER, M.D.
PRESIDENT-ELECT OF THE AMERICAN MEDICAL ASSOCIATION

was instrumental in stimulating the work of Carroll on the Yellow Fever Commission. The contributions of Dr. Thayer have also concerned particularly studies of the blood in various pathologic conditions, especially in typhoid, the cardiac and vascular complications of chorea and typhoid, arteriosclerosis, heart murmurs and heart block. These accomplishments have been recognized by his election to honorary membership in numerous foreign medical societies. He received the distinguished badge of the Red Cross of Russia in 1917, the Distinguished Service Medal of the United States government in 1919, and the rank of Officer in the Legion of Honor of France in 1923. In the American Medical Association, Dr. Thayer has been a willing and an important worker. He was Chairman of the Section on Practice of Medicine in 1902-1903. The *Archives of Internal Medicine* has had his services as a member of its editorial board since its publication was begun, in 1908, and the Judicial Council has benefited by his experience since 1919. Quite recently, Dr. Thayer has been selected to deliver the Bright lectures in clinical medicine, and will depart shortly to visit England for this purpose. In honoring him, the House of Delegates of the American Medical Association recognizes the leadership of its body not only in policies affecting the physicians of this country, but also in the practice of medicine and in scientific achievement.

A POSSIBLE FACTOR IN STERILITY

The recent investigations on the possible relations of diet to sterility and the discovery of a substance—vitamin E—that may be concerned with fertility in both the male and the female have been so striking and unusual that they may divert attention from other equally important factors in relation to reproduction. In addition to the elaboration of potent spermatozoa, to proper ovulation and to effective placentation, there are other conditions both anatomic and chemical that must be realized to secure successful gestation. Kurzrok and Miller [1] of the Columbia University College of Physicians and Surgeons, New York, have pointed out that the plug of mucus filling the cervical canal and the external os is very viscous and adhesive, and when pulled away from the cervix it forms a slimy string which is broken with difficulty. In cases that do not present pelvic pathologic changes the mucus is semitransparent; when there is a lesion such as an infection, laceration, eversion or erosion, the cervical mucus tends to become mucopurulent in character and more adhesive. The mucous plug consists largely of a mucin and water. It presents, unless altered, a considerable barrier to the passage of spermatozoa. According to Kurzrok and Miller, semen exerts a highly specific lytic action on the mucin of the cervix. The solvent effect appears to be enzymic in character. The substance responsible for this action is thermolabile, as enzymes are; and it does not depend on the presence of spermatozoa. Tests made with mucus from a patient with a leukorrheal discharge due to a lacerated cervix, and from one with acute gonorrhea, indicated that the digesting action of normal semen is markedly diminished or stopped by the presence of pus in the mucus. The New York investigators believe that the lytic substance of the semen may be an important factor in the passage of spermatozoa up the genital tract, and that its absence may be an etiologic factor in some cases of sterility in which no explanation has heretofore been offered.

1. Kurzrok, R., and Miller, E. G., Jr.: Biochemical Studies of Human Semen and the Mucin of the Cervix Uteri: I. Proc. Soc. Exper. Biol. & Med. **24**: 670 (April) 1927.

THE CAMPAIGN AGAINST LEPROSY

General Leonard Wood, Governor of the Philippine Islands, favors an appeal to the American people for $2,000,000 with which to fight leprosy in the islands. The reasons for the appeal to private subscription rather than for an appropriation by the United States government were well presented to a congressional joint committee.[1] The Culion Leper Colony is probably the greatest leprosy laboratory in the world. It shelters about 6,000 lepers, and under improved methods of treatment 1,006 of these patients have been returned to their homes as having an arrested and noncontagious form of the disease. Living conditions in the colony have been improved, and, more important for the future, a devoted staff is carrying on research. The colony is controlled by the Philippine Health Department, which appropriates annually $600,000 for its maintenance. This amount is more than a third of the total Philippine appropriation for health work and represents the utmost financial support that the Philippine government can give to the leprosy campaign. The appropriation, however, is insufficient. Accordingly, bills were introduced in the Congress of the United States which would provide the necessary funds and which would also create a Philippine leprosy commission. The commission so created would assume the whole problem, relieving the overburdened Philippine Health Department of the task. To the American mind, this is the efficient solution, and, therefore, all that could be desired. In the opinion of those most intimately in touch with the work, however, it would nullify the progress that has been made. The reason for this is that most of the leprosy is found among the ignorant and the poverty stricken, and Filipinos of this class are suspicious and fearful. Their cooperation in leprosy work has been won with difficulty. It was secured only by appealing to them through their own people. Nothing could be accomplished without their cooperation. At present, fear that the campaign will be taken over by the Americans and administered by force is acute and inhibitory. Passage of the bills concerned would, apparently, undo the work of years. Under these conditions the joint committee that was investigating the problem has thrown the weight of its influence with the desires of those who are prosecuting the work in the Philippines and has expressed the "belief that this is a matter for private rather than governmental aid."

1. Leprosy in the Philippine Islands: Joint Hearings before the Committee on Territories and Insular Possessions, U. S. Senate and Committee on Insular Affairs, House of Representatives; Sixty-Ninth Congress, second session on S. 5434 and H. R. 16618, Part 3, Feb. 15, 1927; Government Printing Office.

PROCEEDINGS OF THE WASHINGTON SESSION

MINUTES OF THE SEVENTY-EIGHTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT WASHINGTON, D. C., MAY 16-20, 1927

HOUSE OF DELEGATES

First Meeting—Monday Morning, May 16

(Continued from page 1646)

The House of Delegates convened, and was called to order at 10 o'clock by the Speaker, Dr. F. C. Warnshuis, Michigan.

Preliminary Report of the Committee on Credentials

A preliminary report of the Committee on Credentials was submitted by the Chairman, Dr. J. D. Brook, Michigan, who reported that there had been filed with the committee registrations totaling ninety-two members with proper credentials. On motion of Dr. Brook, seconded and carried, the report of the Committee on Credentials was considered the roll call of the House.

The next order of business was the presentation, correction and adoption of minutes of the Seventy-Seventh Annual Session.

On motion of Dr. E. J. Goodwin, Missouri, seconded and carried, the minutes of the last session were approved as printed.

The Vice Speaker, Dr. Allen H. Bunce, Georgia, took the chair after which the speaker delivered his address (THE JOURNAL, May 21, p. 1642).

Dr. William Allen Pusey, Illinois, moved that the message to the President be approved and the Secretary be instructed to forward it.

Dr. A. T. McCormack, Kentucky, seconded the motion, which was carried by a rising vote.

The address of the Speaker was referred to the Reference Committee on Reports of Officers.

Reference Committees

The Speaker resumed the Chair and announced the appointments to reference committees:

SECTIONS AND SECTION WORK

T. B. Throckmorton, Chairman..Section on Nervous and Mental Diseases
Isaac A. Abt.....Section on Diseases of Children
J. H. Cannon.....South Carolina
S. P. Mengel.....Pennsylvania
Wells Teachnor, Sr.....Ohio

RULES AND ORDER OF BUSINESS

Henri P. Linsz, Chairman.....West Virginia
E. A. Pray.....North Dakota
Henry B. Costill.....New Jersey
F. A. Carmichael.....Kansas
G. R. Proctor.....Idaho

MEDICAL EDUCATION AND HOSPITALS

William Allen Pusey, Chairman.....Illinois
Irvin Abell.....Kentucky
F. B. Lund.....Massachusetts
J. A. Witherspoon.....Tennessee
J. C. Litzenberg.....Minnesota

LEGISLATION AND PUBLIC RELATIONS

E. J. Goodwin, Chairman.....Missouri
A. T. McCormack.....Kentucky
A. D. Dunn.....Nebraska
B. R. Shurly.....Section on Laryngology, Otology and Rhinology
D. E. McGillivray.....Washington

HYGIENE AND PUBLIC HEALTH

H. M. Brown, Chairman.....Wisconsin
J. R. Kevin.....New York
C. E. Mongan.....Massachusetts
V. G. Vecki.....California
P. S. Roy.....District of Columbia

AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

Holman Taylor, Chairman.....Texas
S. W. Welch.....Alabama
L. H. McKinnie.....Colorado
W. R. Steiner.....Connecticut
C. T. Pigot.....Montana

REPORTS OF OFFICERS

C. E. Humiston, Chairman.....Illinois
A. E. Bulson, Jr.....Indiana
J. N. Vander Veer.....New York
J. N. Henry.....Pennsylvania
W. G. Ricker.....Vermont

REPORTS OF BOARDS OF TRUSTEES AND SECRETARY

A. W. Booth, Chairman.....New York
C. J. Whalen.....Illinois
H. G. Stetson.....Massachusetts
J. N. Hunsberger.....Pennsylvania
Southgate Leigh.....Virginia

CREDENTIALS

J. D. Brook, Chairman.....Michigan
W. O. LaMotte.....Delaware
B. L. Bryant.....Maine
C. E. Piersall.....Nevada
W. A. Cook.....Oklahoma

MISCELLANEOUS BUSINESS

Albert Soiland, Chairman.....California
S. M. Blackshear.....Louisiana
Charles O'Donovan.....Maryland
D. E. Sullivan.....New Hampshire
T. O. Freeman.....Illinois

Addresses

The Speaker introduced the President, Dr. Wendell C. Phillips, New York, who delivered his address (THE JOURNAL, May 21, p. 1644), which was referred to the Reference Committee on Reports of Officers.

The Speaker introduced the President-Elect, Dr. Jabez N. Jackson, Missouri, who delivered his address (THE JOURNAL, May 21, p. 1646), which was referred to the Reference Committee on Reports of Officers.

The Speaker introduced Dr. Hubert Work, Secretary of the Interior, who said:

Mr. Speaker and, I am sure I can say, My Good Friends in the Other Life: I can for the moment appreciate fully, I am sure, the impulses that a retired fire horse turned out to pasture must feel when the fire engine goes by. (Laughter.) I too have broken down the fence, and though a little late in arriving, I am here again.

To pursue the analogy a little bit further, I know that I will be of no use now that I have arrived. (Laughter.)

But the pleasure is just as acute to see the work go on as it did when I was a part of it, and I am sure by the full attendance here this morning and from what I know from the outside, gleaned from my semidetached position, that the American Medical Association is running true to form and the standards of its House of Delegates are fully as high as, if not higher than, they were in my time.

It is a little humiliating, perhaps, and yet the lesson is wholesome, I am sure, for men like Dr. Simmons sitting back there and myself to feel that this great organization is going forward as well and probably better since we have stepped aside. On the other hand, as a matter of self-respect, we take unction to ourselves and feel and say to each other that it would not have gone forward with such vigor and strength and credit had it not been for our participation. (Applause.)

REPORTS OF OFFICERS

Report of Secretary

Dr. Olin West presented the Report of the Secretary as printed in the Handbook. The report was referred to the Reference Committee on Reports of Board of Trustees and Secretary except those portions of the report dealing with amendments to the Constitution and By-Laws. These were referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Report of the Board of Trustees

Dr. Edward B. Heckel, Pennsylvania, chairman of the Board of Trustees, presented the report of the Board in the Handbook. The report was referred to the Reference Committee on Reports of Board of Trustees and Secretary.

Report of Judicial Council

Dr. M. L. Harris, Illinois, presented the report of the Judicial Council as printed in the Handbook. The report was referred to the Reference Committee on Reports of Officers, except the last two paragraphs, which were referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Report of the Council on Medical Education and Hospitals

Dr. Arthur Dean Bevan, Illinois, chairman of the Council on Medical Education and Hospitals, presented the report as printed.

Report on Nursing Service

The Speaker called the attention of the House to the fact that two committees had been appointed to deal with the problem of nurse education and that two reports would be presented. He suggested the appointment of a special committee to consider these reports.

The Secretary announced that the report of the Committee on Grading of Nursing Schools was in his hands.

Dr. E. Eliot Harris, New York, moved that the Speaker be directed to appoint a special committee to consider all reports dealing with nursing and nurse education.

Dr. Harris' motion was seconded by Dr. E. C. Thrash of Georgia and carried.

The report of the Council on Medical Education and Hospitals was referred to the Committee on Medical Education and Hospitals except that portion referring to the nursing problem.

Report of Council on Scientific Assembly

Dr. J. Shelton Horsley, Virginia, Chairman of the Council on Scientific Assembly, in presenting the report, said: I wish to call attention to the enlargement and the greater scope of the scientific exhibit and the necessity of even greater elaboration between that and the work of the sections. If those who read papers in the sections will make every effort possible to have the illustrations or the specimens shown in the scientific exhibit, it will add not only to the attractiveness of the scientific exhibit but also greatly to the effectiveness of the paper. There is no meeting of the Section on Miscellaneous Topics this year.

The report of the Council on Scientific Assembly was referred to the Reference Committee on Sections and Section Work.

Report on Disaster Relief

Dr. William Allen Pusey, Illinois, read a report of the conference called by the American Red Cross at Memphis, Tenn., April 28, to consider the flood situation. The report was referred to the Reference Committee on Legislation and Public Relations.

Special Committee on Nurses' Training and Education

The Speaker announced as the special committee authorized by the House to consider the problem of nurses' training and education: Irvin Abell, Kentucky, Chairman; E. P. Sloan, Illinois; Arthur J. Bedell, New York; Walter F. Donaldson, Pennsylvania; L. J. Hirschman, Michigan.

The reports of the Committee on Nurses and Nursing Education and the Committee on Grading of Nursing Schools were referred to this committee.

Report of the Advisory Committee on Trachoma Among the Indians

This report was referred to the Reference Committee on Hygiene and Public Health.

NEW BUSINESS

Dr. Albert E. Bulson, Jr., Indiana, offered three resolutions:

Resolution on Medical Publicity

WHEREAS, Some of the prominent members of the regular medical profession have been guilty of bad taste, if not unethical conduct, in permitting their names, and oftentimes a record of their professional attainments, to be published in the lay press in connection with articles or interviews pertaining to medical or surgical subjects; and

WHEREAS, Such articles savor of self-exploitation and very justly may be considered as a bid for patronage or favor; and

WHEREAS, The proper and wholesome education of the public may be served efficiently and well by published medical and surgical articles of an educational nature in the lay press under the auspices of reputable medical societies; therefore be it

Resolved, That it shall be considered unethical for any Fellow of the American Medical Association willingly to permit his name to be connected with any medical or surgical article or interview, of an educational nature or otherwise, that may appear in the lay press and possibly be construed as an act of self-exploitation, and that with the exception of those articles that shall be issued by public health officers or men not in private practice, all educational articles pertaining to medical or surgical subjects shall appear under the auspices of this Association or one of its component societies or constituent associations.

This was referred to the Judicial Council.

Resolution on Insurance Blanks

WHEREAS, There is a growing tendency on the part of some insurance and indemnity companies, as well as industrial concerns, to impose on physicians by requesting or expecting that more or less complete physical examinations, including written reports of same, or that a written expert medical opinion concerning patients, shall be made for nominal fees or perhaps no fees at all, and that there is increasing tendency on the part of such organizations or concerns to shift responsibility by making erroneous claims that the services are in the interest of the patient or client from whom the physician cannot justly claim compensation; therefore be it

Resolved, That it is the sense of the American Medical Association as represented by this House, that the members of the American Medical Association are under no moral or legal obligations to furnish professional services or expert professional opinion concerning any patient, or reports concerning professional services rendered any patient, to insurance or indemnity companies, to industrial concerns or their agents, or for the benefit of any third party, unless paid the customary fees charged by the medical men of that community for similar services rendered to private patients.

This was referred to the Reference Committee on Miscellaneous Business.

Resolution on Annual Service Facilities

Resolved, That the annual sessions of this Association shall be held only in cities in which the facilities for properly caring for all the activities of the Association have been canvassed and approved by the Board of Trustees in advance of the time when decision as to meeting place is to be made; and be it further

Resolved, That to enable the House of Delegates to vote intelligently on this question, the Board of Trustees at each session shall present its approval of two or more cities which on investigation by the Board have been found to possess ample and adequate facilities for caring for the Association and all its activities in a satisfactory manner for the ensuing session, and be it further

Resolved, That the Board of Trustees shall have the authority to change the place for holding the annual session if an emergency arises or if for any reason it is deemed advisable by the Board to change from the selection made by the House of Delegates.

This was referred to the Reference Committee on Miscellaneous Business.

Motion for Executive Session

Dr. William H. Mayer, Pennsylvania, moved that any resolution referable to the situation of alcohol as a therapeutic agent or the legal questions involved be considered or introduced only in executive session.

The motion was seconded by Dr. Isaac Abt, Section on Diseases of Children, and carried unanimously.

The Speaker requested that such resolutions be withheld until the Speaker has indicated that the House will go into executive session.

Resolution on Criticism of Practice

Dr. E. P. Sloan, Illinois, presented the following resolution, which was referred to the Judicial Council:

Resolved, That section 7, chapter II, of the Principles of Medical Ethics of the American Medical Association shall be amended by inserting after "Profession," the fourth word in the fourth line, the following:

"All questions affecting the professional reputation or standing of a member or members of the medical profession shall be considered only in executive sessions or by special or duly appointed committees on ethical relations." Making section 7 of chapter II read as follows:

"Safeguarding the profession. Section 7. Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. All questions affecting the professional reputation or standing of a member or members of the medical profession shall be considered only in executive sessions or by special or duly appointed committees on ethical relations. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education."

Resolution on Heroin

Dr. S. M. Blackshear, Louisiana, read the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

Resolved, By the House of Delegates of the American Medical Association in annual session convened at Washington, D. C., May 16, 1927, that:

WHEREAS, Authorities agree that the narcotic evil is almost wholly a police rather than a medical problem, and

WHEREAS, From the past experience with laws of this nature we feel that the drug addict will continue to get their supplies of heroin unless they be dealt with in other fashion, and that therefore the sufferers from this proscription will be the patients of the physicians and surgeons in their legitimate practice, therefore the Congress of the United States be and is hereby petitioned, through our Senators and Representatives, to repeal said amendment (H. R. 7079), that each of our Senators and Congressmen be furnished a copy of this resolution, with the appeal to help us free ourselves from the bonds of too many restrictions in our work; further be it

Resolved, That the proper officials of the American Medical Association be requested and instructed to bring up this subject matter for consideration before the proper authorities of Congress, with the object in view of having the above actions of the House of Delegates properly executed and made into law.

Resolution on Veterans' Bureau

Dr. H. M. Brown, Wisconsin, presented the following communication from an officer of the Veterans' Bureau.

"At the last annual meeting of the Association of Military Surgeons a resolution was adopted granting the medical officers of the Veterans' Bureau the same privileges of membership in that organization as are accorded to the officers of the Army, Navy and Public Health Service. It is the desire of the medical service of the Veterans' Bureau to have the physicians connected with the bureau as closely associated with the American Medical Association as may be, and in view of the above it is especially requested that the regular full-time medical officers of the Veterans' Bureau on active duty be granted fellowship in the American Medical Association on the same basis as are other officers of the government. The medical director or some person delegated by him would be pleased to appear before the House of Delegates and discuss the matter more at length."

The Speaker: Referred to the Reference Committee on Rules and Order of Business.

Resolution on Medical Practice in District of Columbia

Dr. Philip S. Roy, District of Columbia, read the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The Medical Society of the District of Columbia is seeking enactment by the Congress of the United States of a comprehensive medical practice act, which provides for an adequate examination of all persons seeking to treat ailments of the human body, and

WHEREAS, The physician residing within the District of Columbia are disfranchised and deprived of representation in either the Senate or the House of Representatives, being denied the privilege of ballot, a right accorded every citizen of the United States excepting those residing within the District of Columbia, and

WHEREAS, The city of Washington, because of the inadequacy of its present laws, has become the mecca for cultists and irregulars of every description, as well as the diploma mills of the lowest type, be it

Resolved, That the House of Delegates through its membership from the several states affords its aid and support to the Medical Society of the District of Columbia by suitable representations to the members of the Senate and House of Representatives, and urges similar cooperation from the various state associations in securing this much needed legislation, fostered by the District of Columbia Society.

Resolution on Income Tax Exemptions

Dr. E. A. Hines, South Carolina, read the following resolution, which was referred to the Reference Committee on Miscellaneous Business:

WHEREAS, When the last two revenue bills were pending in the House of Representatives of the United States Congress two years ago and four years ago, respectively, Hon. J. J. McSwain of South Carolina offered amendments providing and stipulating that any taxpayer should be privileged to deduct from his income his expenses for himself and family incurred for medical treatment, surgical operations and hospital and funeral expenses, and medical treatment to include professional services, nurse hire, and drugs, and

WHEREAS, The reason for this exemption is stronger than the present exemption permitted for losses by fire and storm, and the breaking and wearing out of machinery and bad debts, inasmuch as the human body is the greatest factor in the earning of income, and the expense of keeping it in good order, and of correcting disorder should, in good conscience and sound logic, be legally deductible, and

WHEREAS, The only argument made against the amendment was that it might lead to fraud on the government, though the same argument could be made as against all deductions now allowed, even with greater force, for no man could falsify his return by claiming that he had an operation, or a death in his family, and even a claim of medical services, including drugs and nurse hire, could be so easily checked that fraud would be impossible, and

WHEREAS, Congressman McSwain feels that a very little propaganda among the members of the medical profession and among the druggist and undertakers will enable him to write this provision into the next revenue bill; therefore be it

Resolved, That the South Carolina Medical Association by its House of Delegates in convention assembled does hereby memorialize and pray the House of Delegates of the American Medical Association to adopt resolutions endorsing this proposed amendment to the United States revenue bill relating to income taxes, and to take immediate steps to invoke the interests and endorsement of every constituent state medical association for this important movement, urging each such association, and through it each county association, to adopt strong resolutions of endorsement and to advise its respective state Congressmen of its action, and be it further

Resolved, That the delegates from the South Carolina Medical Association to the American Medical Association are hereby instructed to present this preamble and resolution to the House of Delegates of the American Medical Association at its coming meeting in Washington, D. C., and to make every effort to have inaugurated and prosecuted the suggested movement for the attainment of the ends hereinbefore set forth.

Resolution on Cosmetics

Dr. Orrin Sage Wightman, New York, at the request of the Department of Legal Medicine of the New York City Department of Health, read the following resolution relative to the legal regulation and control of the sale and commercial use of toilet preparations, which was referred to the Reference Committee on Hygiene and Public Health:

WHEREAS, Commercial preparations for preserving and enhancing personal beauty are being used by the public in increasing quantities and to an extent hitherto unknown;

WHEREAS, Such preparation include a not inconsiderable number that contain ingredients liable to cause bodily harm;

WHEREAS, Purchasers of such preparations and persons commercially using them and on whom they are commercially used cannot discover which of them may be safely used and which are potentially harmful except by trial and at risk of personal injury; and

WHEREAS, There is no adequate law forbidding the use of essentially harmful ingredients in such preparations and requiring that labels declare the presence of such ingredients as are potential for harm; therefore be it

Resolved, That it is the sense of the House of Delegates of the American Medical Association that a law should be promptly enacted by Congress to regulate and control the manufacture, distribution, sale and commercial use of toilet preparations for preserving and enhancing personal beauty, whether for the mitigation or cure of disease or otherwise, so far as such legislation lies within the jurisdiction of the federal government, and that correlated uniform state laws should be enacted by the several state legislatures to protect the people within their respective jurisdictions from harm through the manufacture, distribution, sale and use of such preparations.

Dr. Daniel S. Dougherty, New York: The Medical Society of the State of New York offers the identical document that Dr. Wightman has just presented from the Department of Health of New York City. There is no use of presenting it again.

The Speaker: The same will be referred to the same Reference Committee.

Resolutions on Narcotics

Dr. Charles O'Donovan, Maryland, read two resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

FIRST RESOLUTION

Resolved, That the opposition of the Board of Trustees of the American Medical Association to the bills proposing certain amendments of the Harrison Narcotic Law, mentioned on pages 64-65 of the Handbook for the delegates of the American Medical Association for 1927, is hereby approved.

SECOND RESOLUTION

Resolved, That the House of Delegates request the delegates of the medical and chirurgical faculty of Maryland, to the American Medical Association, to introduce a resolution and if possible have same passed, requesting the Bureau of Narcotics to restore heroin to the list of available drugs.

Report on Indigent Physicians

The Speaker requested Dr. George H. Simmons, Chairman, to present the report of the special committee appointed to investigate the need for homes for indigent physicians.

Mr. Speaker and Members of the House of Delegates:

In accordance with your action taken at Dallas, Texas, last year, our committee was appointed, "to make a survey of the physical condition and financial status of its members who are incapacitated for earning their support by the practice of their profession, with the objective of establishing, managing and sustaining a home or homes for their care and maintenance."

A questionnaire was prepared and, together with a letter explaining the object of the survey, was sent to the secretaries of state associations, for them to forward to secretaries of component societies.

The questions in the questionnaire that concern us were:

(1) "In your opinion, based on personal knowledge or on inquiry among older members of our profession: How many indigent physicians are there in your county who are so situated — because of either age or physical infirmity — as to entitle them to admission to a home founded and supported by the medical profession, if there were such a home? (Physicians who have relatives able and willing to support them should not be considered as 'indigent' in this connection; they might be included in the report but, if so, the facts should be indicated.)"

(2) "Is there any eleemosynary institution in your county in which indigent physicians might find a haven of refuge; if so, is there a physician in such institution at the present time?"

The letter which accompanied the questionnaire contained these two paragraphs:

> The primary object of this survey is to secure data specifically as to the need and advisability of establishing such a home or homes as contemplated by the action of the House of Delegates of the American Medical Association. However, the committee might find it advisable to recommend an alternative method of meeting the needs of those of our members who, because of age or physical disability, might have become incapacitated and indigent. For instance, permanent benevolent funds might be created to be used with discretion when necessary.
>
> The survey should include those physicians who, for any reason, have become dependent inmates of homes supported by city, county or state, or by philanthropic or fraternal organizations. Each county secretary is asked to secure the information regarding the institutions in his county. The report might include physicians who are not members of the organization, but, if so, this should be indicated.

The summary of results of this survey by states is given below. While only a minority of the questionnaires were returned from a few of the states, we feel that a careful review of the information herewith submitted will bring out the fact that we have had before us sufficient detailed information to provide us with a graphic cross section of the conditions studied in a great majority of the states in the Union.

The fact that from some states only a minority of the questionnaires were returned may be explained in part: It is certainly probable that if there were an incapacitated and indigent physician in a county, the secretary of that county society would know of the case, and that he would be interested and report it at once. If, on the other hand, he did not know of any such case, he might not be interested and might lay the questionnaire aside—and forget it. However, it will be seen by referring to the matter under the "Summary by States," that a number of state secretaries who naturally would have knowledge of conditions included the whole state in their summaries.

An analysis of the reports shows that twenty-five states report no indigency; the remainder report a total of forty-one cases. A large number of the answers to Question 1 were in a monosyllable: "one," "two" or "three," as the case might be. In such instances, letters asking for specific information were addressed to the secretaries concerned. Many of the replies indicated that the information given was based on gossip or on rumor, which, when pursued, was discarded. For instance, the secretary of one component society says: "To my surprise, the physician I reported as indigent had $12,000 in a savings account and in bonds." Another secretary, who had written "three" in answer to Question 1, replied: "The three doctors that were referred to in the questionnaire have left the county except one, and he has returned to practice." These are samples—others will be found in the "Summary by States." It would be merely guess work to estimate how many of the physicians—about twenty-one—concerning whom we have no information could be classed as incapacitated and indigent. Of the twenty about whom we have information, two are drug addicts; one is in a local eleemosynary institution and—it is reported—"he prefers to stay in the institution"; two are being cared for in private homes, and one has been practicing illegitimately and "deserves little consideration." Others, the reports show, could not be persuaded to go to a home if there were one. Further, there are quite a number whose circumstances are such as could be satisfactorily met only by financial aid in their homes; they are not institutional cases.

Those who are interested will, of course, read the reports, as well as the opinions expressed by reporters, published in the "Summary by States." Especially interesting will be the reports from Massachusetts, Pennsylvania and Missouri.

The committee is of the opinion that even if the investigation had revealed a much larger number of incapacitated and indigent physicians, the establishment and support of a national home, or of homes, by the medical profession would not be the best way to meet the needs of such physicians.

To remove a physician from the community in which he had long practiced and in which he had many old patients as well as friends, both lay and medical, would be unkind. Old people cling to their old associates, and an old physician is not an exception. The committee believes that it would be better to render such aid as would make it possible for a physician, indigent and incapacitated, to end his days among those whom he knows and who know him. Certainly, from the economic point of view, this plan would be more satisfactory than to send him to such a home as proposed. The overhead expenses alone connected with a home, even with such as those established by secret and fraternal orders and by religious bodies, are as great per capita as would be required in the majority of our cases to support them in their home communities. It may be taken for granted, however, that if the American Medical Association undertook to establish a home, the standard in both the buildings and the surroundings, as well as in the management, would have to be creditable to the medical profession.

As might have been expected, this survey revealed the existence of cases of temporary, pecuniary stress brought on by illness, by accident or by other causes, that call for temporary relief only.

Existing needs, therefore, are not alone with respect to aged and permanently incapacitated, indigent physicians, but also for those temporarily incapacitated and in pecuniary distress. Several state associations and county medical societies have well defined plans for meeting these needs, and aid is rendered quietly and without publicity.

In its investigation, the committee has accumulated a large amount of data on this particular subject, which it will turn over to the Secretary of the American Medical Association; it is recommended that the Secretary of the Association be requested to secure full information with respect to what is now being done in this regard by the profession—state and local—so that it may be generally available to the end that other state and component societies may take measures to afford relief for worthy physicians, their widows and orphans, who may be in need and that he report with recommendations at the next annual meeting.

The results of this investigation convince the committee that the need for a national home for incapacitated and indigent physicians is not sufficient to warrant the American Medical Association in "establishing, managing and sustaining a home," as contemplated by the resolutions creating our committee.

The committee desires to thank the secretaries of constituent and component societies for their cooperation and assistance in making this survey; without their aid this investigation could not have been made.

Respectfully submitted.

G. H. SIMMONS, Chairman.
JOHN A. WITHERSPOON.
A. R. MCCOMAS.
WALTER F. DONALDSON.
D. E. SULLIVAN.

SUMMARY BY STATES

ALABAMA

The Assistant Secretary of the Medical Association of the State of Alabama, Dr. D. L. Cannon, conducted the survey for that state, and reports as follows:

On the basis of fifty-six questionnaires returned by as many counties out of the sixty-seven, constituting the medical association, I am led to believe that there are no really indigent physicians in Alabama.

ARIZONA

Arizona has eleven component societies; secretaries of six returned the questionnaires properly filled out. No indigent physicians are reported.

ARKANSAS

Dr. W. R. Bathurst, Secretary of the Arkansas State Medical Society, conducted the survey in that state. Reports were received from twenty-five of the sixty-three county societies in this state. One county secretary says, "There is one physician in the county with tuberculosis. He is able to care for himself for awhile but not very long. He has no nearer relatives than two nephews. No immediate family."

Another secretary reported one physician as indigent. A letter of inquiry brought out the fact that this doctor, who is fifty-six years old, had a stroke of hemiplegia two years ago and has been physically helpless since. The secretary states that the doctor has a wife and two children, and a "little home not in the clear but just how much is due on it I do not know"; that he has an income of $75.00 a month from sick and accident policy, and $4500.00 life insurance from which premiums are waived, and that he is a member of his component county society, but that since his stroke his dues have been waived.

CALIFORNIA

Dr. Emma W. Pope, Secretary of the California Medical Association reports: Nineteen out of the forty component societies in California have returned the questionnaires. Five indigent physicians are reported in the whole state. One of them is in a county institution and two are reported as nonmembers. We have been unable to secure further information in reply to letters of inquiry regarding them.

Under date of April 30, Dr. Pope, writes:

"No further replies were received following those previously forwarded to you. From the answers of the nineteen secretaries, I would say a home for incapacitated and indigent physicians in California is not needed."

COLORADO

Dr. F. B. Stephenson, Secretary of the Colorado State Medical Society, secured reports from twenty of the twenty-four component societies in his state. All except one answered question 1 in the negative. One county secretary wrote "One" in answer to question 1; a letter of inquiry has brought no response.

CONNECTICUT

Five of the eight component societies in Connecticut have returned the questionnaires. No indigent physicians are reported.

Dr. C. W. Comfort, Secretary of the Connecticut State Medical Society, says that these five societies represent the three largest counties and two smaller ones. He adds, "My candid impression is that there is no need for a 'home' in this state."

DELAWARE

Dr. W. O. LaMotte, Secretary of the Medical Society of Delaware, writes that reports were received from all three of the component branches of his society. There are no indigent physicians.

DISTRICT OF COLUMBIA

The Secretary of the Medical Society of the District of Columbia, Dr. C. B. Conklin, reports,

I have no personal knowledge of there being any physician in the District who could be considered a candidate for any proposed "Home."

FLORIDA

Dr. Stewart G. Thompson, Business Manager of the Florida Medical Association, writes that only six of the thirty component societies in Florida have reported, and that Question 1 is answered in the negative in each instance.

GEORGIA

Forty-nine of the one hundred and five questionnaires sent to the county societies were returned: All answers to Question 1 were negative. Dr. Allen H. Bunce, Secretary of the Medical Association of Georgia, in forwarding these questionnaires, says:

We do not think a home for aged physicians is needed. It would be much better to keep aged and incapacitated physicians in their own communities and with their families and friends.

IDAHO

Dr. J. N. Davis, Secretary of the Idaho State Medical Association, received and forwarded ten of the twelve questionnaires that were sent to the county societies in his state. Question 1 was answered in the negative in each instance.

ILLINOIS

Dr. Harold M. Camp, Secretary of the Illinois State Medical Society, conducted the survey in his state. Fifty-six of the ninety-one component societies returned the questionnaires. Of these, fifty-three reported no indigency. One county secretary reported; "One physician, old, feeble and almost destitute." In reply to a letter of inquiry, the secretary says:

"The doctor I refer to is Dr. C. He is a graduate of Missouri Medical College, St. Louis, class of 1876, and was born in 1850. This doctor's support is his daughter. He is a cripple and his daughter is getting up in years. She is also the support of the family. The doctor is an honorary member of our local society."

Another county secretary reported, "Possibly one." In reply to a letter of inquiry, the secretary says: "I think the physician I had in mind has relatives who can and will take care of him."

The third of the three reported "One—perhaps." No reply has been received to our letter of inquiry regarding this case.

In reply to our request for information concerning medical relief efforts that had been made by the Chicago—Cook County—Medical Society through a committee of which he is chairman, Dr. William Allen Pusey writes:

"At the time of my presidency of the Chicago Medical Society in 1917-18, a doctor's widow applied to the Society for help and it occurred to me that it would be a very useful thing to do, for the society to take care of the distress that occurred among its members. A Committee of Physicians' Relief was appointed of which I was made chairman; and provision of a fund was made for meeting the obligations that might arise. A notice of the committee and its purposes were published in the Bulletin and the officers of the branch societies were advised to look up cases of need among doctors and refer them to me. Much to my surprise no demands developed.

What we proposed to do was to take care of actual need among physicians and their families. Practically no cases of destitution came to my attention. The widow who sug-

gested the idea to me was one case. She, I learned, was the widow of a physician who had skated on the edge of destitution all of his life. Another case was a physician for whom appeals were made because of long illness. After two winters of contributions to him it was felt that further contributions were not necessary.

Besides these two cases no others came to the attention of this committee. So far as I know the committee has never been discharged, but has ceased to function through lack of demands. From my experience, I should say that in Chicago there is among physicians practically no destitution of a degree that demands actual charity."

INDIANA

Mr. T. A. Hendricks, Executive Secretary of the Indiana State Medical Association, conducted the survey for that state. He has transmitted to the Committee a complete tabulated report. Sixty-eight of the eighty-one county societies reported. One indigent physician is reported from each of two county societies.

Regarding one of these, definite information has not been received. The county secretary reports concerning the other.

Dr. ————, aged 75, is without means of support and is almost physically unable to do much active practice. He is a Mason and would be entitled to aid in the Indiana Masonic Home.

IOWA

Dr. Tom B. Throckmorton, Secretary of the Iowa State Medical Society, writes:

Concerning indigent physicians in Iowa, I would say that I recall only one instance where someone has written into my office to ascertain if the Society had a fund available to use for the care of an indigent physician. About two weeks ago I received such a letter. I since learned that aid had been given the deserving Doctor. If there are physicians in this state needing financial help the matter has not come to my attention outside of the above mentioned incident.

KANSAS

Dr. J. F. Hassig, Secretary of the Kansas Medical Society, writes that reports were received from twenty of the sixty-one county societies in Kansas. One indigent physician was reported from each of three county societies.

One case: "Doctor————, 73 years of age, mental and nervous breakdown. He has relatives who could help but his wife supports him. He is an honorary member of the society. He is not in active practice."

Of the second, the county secretary says: "A drug addict, making a precarious living illegitimately."

The third "Has friends in East able to care for him, but he has lived here for fifty years."

KENTUCKY

Dr. A. T. McCormack, Secretary of the Kentucky State Medical Association, reports that sixty-eight of the one hundred and twelve component societies in his state returned the questionnaires. Three indigent physicians were reported. Specific information concerning the three has not been received.

LOUISIANA

Through an excusable misunderstanding, a complete, systematic survey of Louisiana was not made. Dr. C. A. Weiss of Baton Rouge, who, for the past five years, has been chairman of the Committee on the Care of the Indigent Physicians of the State of Louisiana and who, therefore, would naturally have a fair knowledge of conditions in his state, in a recent letter on the general subject, writes:

"I am happy to say that I have not heard of many physicians requiring a helping hand in Louisiana. A Home for Physicians does not appeal to me. The mere fact of having to go to a Home has numerous drawbacks. Then, too, a Home is expensive to maintain and, no matter where located, it would not be convenient to all doctors needing help."

MAINE

Dr. B. L. Bryant, Secretary of the Maine Medical Association, reports:

I am returning to you the questionnaires concerning incapacitated physicians. We have heard from all of the county societies (15) except two in the state. They are unanimous in reporting that there are no physicians in need of help, or a home, in their counties. I feel as I wrote you previously that so far as the state of Maine goes, we have no physicians in need of a home or of financial aid at the present time.

MARYLAND

Dr. J. A. Chatard, Secretary of the Medical and Chirurgical Faculty of Maryland, writes:

We have just been holding our annual meeting and I have been waiting for this opportunity to ask the various county members who attend, for their opinion regarding indigent physicians in Maryland. They all say that there are none in their counties and I believe this to be true, with possibly one or two exceptions. Personally, I know of none in Baltimore City, but I would not like to say "ex cathedra" that there are none.

Our former Committee on Relief for Widows and Orphans, has been renamed the Eugene Fauntleroy Cordell Fund Committee. There are several beneficiaries under this but the question of indigent physicians is one that they have not gone into and they do not feel that it properly comes under their jurisdiction.

MASSACHUSETTS

Dr. W. L. Burrage, Secretary of the Massachusetts Medical Society, reports:

"We have not thought it wise to trouble the secretaries of our eighteen District Medical Societies as to questionnaires, relying as we do on the activities of the Massachusetts Medical Benevolent Society, which was organized in the year 1857 and has carried on its good work in relieving incapacitated physicians ever since. It is an independent society with officers of its own and a personnel made up of the charitably inclined members of the medical profession of the State. So far as known there are no medical men in Massachusetts who are incapacitated that are not cared for by this society."

The state department of Massachusetts which supervises public relief, including private charities as well as public departments and alms houses, reports that in twenty years only seven physicians received such aid, four of whom were very old, and the remainder of whom were drug addicts.

Jeffrey R. Brackett, founder and professor in the "School for Social Workers" at Harvard University, and at Simmons College who investigated the situation for the Massachusetts Medical Society, expresses the following opinion:

"Obviously, the problem of aged and needy doctors in any particular locality is a small one, and the only sound principle of care and treatment is that of individual care, using private families as much as possible and specialized institutions when needed—whether hospitals or homes or infirmaries or alms houses. This principle is the one now generally recognized for care of children, i. e., use of homes in families first, and is fast becoming recognized for old persons. If the doctors in local groups will join to raise necessary funds for such individual care and treatment, according to particular need, whether in family life or in an institution, then these old men can be kept in or near their familiar places and friends."

MICHIGAN

Forty-two of the fifty-three county societies have reported. Dr. F. C. Warnshuis, Secretary of the Michigan State Medical Society, in forwarding these questionnaires, says:

I am returning to you questionnaires covering the state of Michigan, so far as they have been returned in response to two letters that we sent out to county secretaries. These will indicate that at the present time there is but one medical man in a county institution, and he is there by choice and not by force of circumstances. It is quite evident that as far

as Michigan is concerned, we are not in need of any home for aged physicians. The counties not reporting are small counties of scattered population and no large communities or any great number of physicians.

MINNESOTA

Dr. E. A. Meyerding, Secretary of the Minnesota State Medical Association, writes that twenty-eight of the thirty-six component societies in Minnesota have reported. An indigent physician is reported in only one county. The secretary of the county society reports, in brief, that this physician is in the county home; that he is old and infirm but, the secretary thinks he is not entitled to consideration. Good reasons are given for this conclusion.

MISSISSIPPI

Mississippi reports on eight out of its twenty-six county medical societies. No indigent physician. The secretary of the Mississippi State Medical Association, Dr. T. M. Dye, in sending in the last questionnaires, says, "I do not know of a single indigent physician in Mississippi, and I am fairly well conversant with the situation throughout the entire state."

MISSOURI

As the results of the survey in Missouri are illustrative, they are here given in more detail. The secretary of the state society, Dr. E. J. Goodwin, who undertook to make the survey, started his investigation early; this gave him time to secure all the facts concerning individual cases. In December he sent in his first report, to the effect that he had heard from 48 county societies: "In these forty-eight counties, the secretaries report five physicians indigent and incapacitated." No name or other information was given. Dr. Goodwin was asked to get the facts about each case. Later, two other cases were reported, making seven in all. Investigation showed that four of the seven were "self-supporting," and did not need a home or outside assistance. Of the three who are indigent, the following is a brief summary:

Dr. G., 77 years of age, suffering from "arteriosclerosis," graduated from Keokuk P. & S. in 1878, and has been 48 years in his present location. He seems to have been living with his daughter, who evidently was not financially able to care for him. On February 25, Dr. Goodwin reported: "I have completed arrangements with the Physicians Home in New York, and he will go there about March 1. "On March 7, Dr. Goodwin writes that Dr. G. "now declines to accept the hospitality of the Physicians Home. The home was ready to take not only him but his daughter. However, he had declind to go there or elewhere."

Dr. M., aged 66, graduated from Missouri Medical College in 1881, has been in his present location 47 years, and is suffering from "paralysis." A daughter, who is a trained nurse, gave up her work to take care of him. He is a member of his county society, which is quite small. The Masonic body helps some. His family will not consent to placing him in an institution.

Dr. P., aged 75, graduated from Iowa College of Physicians and Surgeons in 1878, and has been in his present location thirty years. He suffers from "paralysis." He is not a member. He lives at home with his wife, who does a little sewing which is their sole income.

Dr. Goodwin says: "In view of the refusal of two of the three to accept hospital care, the question arises how many would decline such provision if we did establish a home for them?"

The final report, dated April 26, reads:

Enclosed is a supplementary report on incapacitated physicians in Missouri. You will note there are three names on the list I now send you; two self-supporting; one relatives can support. This makes a total of ten names in the lists reported to you. One, Dr. M———— has died. Of the remaining nine, two (Dr. G. and Dr. P.) are indigent. These reports represent a total of 69 component county societies out of the 95 in Missouri, leaving 26 not yet heard from. Of these 26, I doubt if we will receive any more names to add to the list.

MONTANA

Dr. E. G. Balsam, Secretary of the Medical Association of Montana, reports that "There is no needy M.D. in Montana that I have discovered."

NEBRASKA

Dr. R. B. Adams, Secretary of the Nebraska State Medical Association, reports that forty-one of the fifty-four county societies returned the questionnaires, and that each of two county societies reported one indigent physician.

Dr. Adams states that he has not been able to secure any information regarding one of the cases. The other case is that of a physician, 81 years of age, who has not been able to practice for some years. Because of valuable service rendered the state association during the early part of his life, he is receiving a practical pension of $600.00 a year. A few of his old friends subscribe a "pot" every year in addition to the pension. He is of such a character and his surroundings are such that he could not be persuaded to go to a home if there were one.

NEVADA

Dr. H. J. Brown, Secretary of the Nevada State Medical Association, writes, "I am glad to state that, so far as I know, we have no incapacitated physicians in Nevada at this time."

NEW HAMPSHIRE

Dr. D. E. Sullivan, Secretary of the New Hampshire Medical Society, sends reports from nine of the ten component societies in his state. Seven answer Question 1 in the negative. One reports:

"One—not a member," and the other, "two." Additional information has not been received from the secretary who reported one indigent physician.

The secretary answering "two" replies: "The two incapacitated physicians are Dr. G. and Dr. L. Dr. G. is 35, was graduated from Tufts in 1913, entered practice in ———— in 1918, at present is incapacitated by a hemiplegia, and is supported as far as I know by insurance and relatives. Dr. L. graduated from University of Pennsylvania in 1895, she is about 50 (estimated) and carries on a rather desultory practice in a small town. Both are members but have been relieved of the expense of paying dues.

NEW JERSEY

Dr. J. B. Morrison, Secretary of the Medical Society of New Jersey, reports:

I have made a careful survey of the counties of the state of New Jersey and fail to find any physicians who are public charges or reported in need of financial assistance. In not a single instance is any physician reported by the county secretaries as being supported by the public.

We have in the state a home for aged bachelors and widowers, with an endowment of six millions, and this does not contain any physician as an inmate.

NEW MEXICO

Dr. C. M. Yater, Secretary of the New Mexico Medical Society, reports that secretaries of six of the twelve component societies in New Mexico returned the questionnaire. One of the six answered, "One" to Question 1. Reply has not been received to a letter of inquiry concerning this physician.

NEW YORK

Reports have been received from twenty of the sixty component societies in New York. Nineteen counties reported no indigency. One county secretary reported one case, but information has not been received in reply to a letter of inquiry.

NORTH CAROLINA

Sixty-four of the eighty-eight county societies reported. Dr. L. B. McBrayer, Secretary of the Medical Society of the State of North Carolina, in sending in the final questionnaires, says:

We were unable to get all the county secretaries to return the questionnaires, but we are pretty sure there are no other indigent physicians in the state saving the one mentioned in ——— county.

In the county referred to, question 1 is answered "One." Reply has not been received to a letter of inquiry.

NORTH DAKOTA

Dr. J. G. Lamont, Acting Secretary of the North Dakota State Medical Association, reports that replies to the questionnaire were received from six of the fourteen district societies in his state. No indigent physicians were reported. Dr. Lamont adds, "We believe that this report is as complete as it can be made at the present time."

OHIO

When the request for a survey of Ohio was presented to the Council of the Ohio State Medical Association, at its first meeting in January, it unanimously promised its cooperation. Mr. Don K. Martin, Executive Secretary, at once sent out the questionnaires to the county societies, followed up and investigated cases that were reported as indigent and incapacitated, and finally submitted a tabulated report, covering all counties heard from. The executive secretary sends the following summary:

Sixty-one of the eighty-eight counties in Ohio returning this questionnaire show that there are scarcely any indigent physicians in the state. Four were being cared for by relatives; two physically incapacitated have sufficient finances to care for themselves, and two were being cared for in religious homes.

OKLAHOMA

Reports from forty-four of the sixty-three county societies were transmitted to this office by Dr. C. A. Thompson, Secretary of the Oklahoma State Medical Association. Forty-three reported no indigency. One county secretary answered "One" to Question 1; a letter of inquiry has brought no response.

OREGON

Five of the fourteen component societies of Oregon reported no indigency. Dr. F. D. Stricker, Secretary of the Oregon State Medical Society, writes:

Relative to the survey concerning incapacitated and indigent physicians in Oregon, I believe that we have done all we can do. The questionnaires were duly sent to the secretaries of the county medical societies last December.

In my capacity as state health officer, I come in close contact with physicians of the state and I do not know of any case of an incapacitated and indigent physician. I should be very glad to do more on this subject, but I do not believe that the conditions in our state are such as to make the care of indigent physicians a problem.

PENNSYLVANIA

Dr. W. F. Donaldson, Secretary of the Medical Society of the State of Pennsylvania, has conducted the survey in his state and submits the following report.

A questionnaire was addressed to eighty-two members, secretaries of county societies, councilors and ex-presidents of the state society residing in the sixty-three of Pennsylvania's sixty-seven counties in which medical societies are extant. Replies were received from sixty-nine regarding conditions in fifty-one counties. A brief summary of the replies is as follows:

Two physicians are at present (1926) indigent residents of insane asylums; one is in a county home; another, totally blind, is well cared for by his children; one, a drug addict, died in 1920 after six months' residence in a county home. In another county, the secretary, who has practiced for forty-three years, states that one physician died in the county home. From the Philadelphia County Benevolent Society, membership in which is limited to members of the Philadelphia County Medical Society, comes the report that but few who sought aid would have been willing to enter a home for indigent physicians and these only if permitted to have their wives accompany them.

It is believed that, during the last twenty-five years, among the eight thousand physicians practicing in Pennsylvania, there has not been an instance in which a sane member of the medical profession in need of care might have been better cared for in a home for incapacitated physicians than in his home community, with the financial aid of his relatives or the assistance of his medical society.

In 1905 the Medical Society of the State of Pennsylvania provided for a medical benevolence fund to be created by allotting from each member's annual dues a sum not to exceed $1, to be kept separate, invested and used only for the relief of pecuniary distress of sick or aged members or for that of the parents, widows, widowers or children of deceased members. This annual allotment has never been less than 10 cents or more than 65 cents, but in the twenty-two years, augmented by contributions from various members and from the treasury of various component societies, it has grown to a sum approximating $36,000. It was never intended that benefits from the fund should take the place of support due from relatives, or that they should be the sole source of support of any beneficiary; rather, it was intended that they should parallel assistance received from other sources.

RHODE ISLAND

Four of the six county societies in Rhode Island reported; no indigent physician is noted in any of them.

Dr. J. W. Leech, Secretary of the Rhode Island Medical Society, writes:

Since 1920 there have been three physicians as inmates of the state hospital for mental diseases. Two have recovered; one has died. At the state infirmary there have been no physician inmates. At the state prison there have been three physician inmates, but concerning two of these, the state public welfare committee states that there is a question as to their status as physicians.

SOUTH CAROLINA

Dr. E. A. Hines, Secretary of the South Carolina Medical Association, writes that twenty-four of the forty component societies in South Carolina reported. Question 1 is answered in the negative in all but one of the counties. The secretary of this county answers "One." A reply has not been received to a letter of inquiry.

SOUTH DAKOTA

Dr. John F. O. Cook, Secretary of the South Dakota State Medical Association, reports that questionnaires were returned from six of the twelve component societies in South Dakota. No indigent physician reported.

TENNESSEE

Dr. John A. Witherspoon of Nashville kindly consented to conduct the survey of Tennessee. Replies were received from forty-one of the sixty questionnaires that were sent out. These forty-one replies cover practically 80 per cent of the physicians of Tennessee.

Two physicians were reported as indigent and incapacitated. There has not been time, however, to receive replies to inquiries regarding one. As to the other, the county secretary reports:

Dr. D., aged 55, graduated in 1899, has a wife who is an invalid, and two dependent children, having lost five from tuberculosis of lungs. He has practiced in the poorest regions and never accumulated a surplus. He recently moved to ———County, where fire destroyed his household goods, all of his equipment and left him quite destitute. His medical friends have helped him financially in order to enable him to continue the practice of his profession.

Dr. Witherspoon writes:

I feel that we can without question say that out of 80 or 85 per cent of the doctors in this state there are only three that are indigent. Their conditions we do not as yet know.

After making an analysis of the material, the Secretary of the Tennessee State Medical Association, Dr. H. H. Shoulders, to whom Dr. Witherspoon turned over the data he collected, corroborated the above.

TEXAS

Dr. Holman Taylor, Secretary of the State Medical Association of Texas, has forwarded questionnaires from fifty-four of the one hundred and thirty-five component societies in his state. Two indigent physicians are reported, but particulars have not been received.

In his final report Dr. Taylor comments:

It does seem to me that there is no need either for a fund or for an institution for the care of old, infirm and indigent physicians in Texas. We tried the situation out some years ago and found only three who would be in the class to which you have reference, and only one of the three, I believe, could lay any more claim to the munificence of the medical profession than on that of any other group. Of course, the medical profession of Texas will join with other states in arranging for the care of worthy physicians who need it and should have it if such a policy is decided on,

but we do not seem to have any very direct need of anything of the kind at the present time.

UTAH

Dr. F. B. Steele, Secretary of the Utah State Medical Association, writes that he sent the questionnaires to the seven component societies in his state, but that only one secretary responded. He adds, "To the best of my knowledge, we have no indigent physician in Utah."

VERMONT

Six of the ten component county societies in Vermont reported. One of the county secretaries answers, "One" to question 1. A letter of inquiry has not brought a response. Dr. W. G. Ricker, Secretary to the Vermont State Medical Society, writes:

I am sorry that only six of my county secretaries answered the questionnaire. However, I think they represent very clearly a cross section of the situation here in the state.

VIRGINIA

Miss A. V. Edwards, Secretary of the Medical Society of Virginia, reports that thirty-two of the fifty-two county societies in Virginia have responded. Question 1 is answered in the negative in reports from all but one county. In this instance it was answered. "Probably two or three." To a letter of inquiry to the county secretary came the reply here condensed:

Without consultation with the doctors whom I had in mind, I could not give names or definite information and do not think it wise to broach the matter to them.

One is over 70, unmarried, and I believe has no relatives in condition to care for him. He may have some income; I do not know. He is too feeble to engage in active practice. Several of his professional friends have given him financial aid.

Another over 60, married, no family. He and his wife have been, and still are, in very poor health and he has had financial reverses. Both have been in hospitals and sanitariums a good deal of late. Doubtful if he will ever be able to practice again. Not yet in abject need but may be.

The third is a widow of a physician, who was left a widow with two small children a few years ago. She has had a terrible struggle to get along and care for them. Help to some extent has been extended by associates of the deceased husband.

The county secretary adds:

It would appear that a fund available in cases of need would be much more flexible and vastly more useful than a "home" in the great majority of instances, and would also be much more economical from the standpoint of overhead. Supplementing the slender resources of those in need would often permit them to retain their own homes and familiar surroundings, which would be more acceptable to those benefited and more economical. Certainly it would be so in the cases I cite.

WASHINGTON

No report by counties was received from Washington. However, Dr. C. H. Thomson, Secretary of the Washington State Medical Association, says:

In this state an indigent physician, unless he was a member of some fraternal or religious association, could only look to the county poor farm for maintenance in the event that his brother practitioners did not come to his assistance.

WEST VIRGINIA

Mr. J. W. Savage, Executive Secretary of the West Virginia State Medical Association, writes that fifteen of the twenty-six component societies reported to his office, and that the reports indicate that there are no indigent physicians in the state. All of the aged physicians have families and relatives to support them. The county societies that reported cover the larger portion of West Virginia and give a good idea of the state as a whole. Mr. Savage says: It is my personal opinion that the remaining societies failed to report because there were no doctors in their areas who would be claimed as indigents. The West Virginia State Medical Association has an indigent fund of more than $6,500. This fund was created by the state association in 1918 and became effective in 1919. Since it was created, only one or two requests for assistance from it have been made.

WISCONSIN

Mr. J. G. Crownhart, Executive Secretary of the State Medical Society of Wisconsin, reports that before the questionnaires were sent to him for distribution he had sent a special letter to the president of each county medical society, together with one to all the councilors and officers of the state society. Returns from these letters, while not entirely complete, indicated that there were but two physicians in the state who were in need of support. One is a drug addict, and the other is amply provided for by close and immediate relatives.

The Executive Secretary adds: "As to worthy incapacitated and indigent physicians, so far as as I can learn by personal letters to every county, there is none in Wisconsin."

WYOMING

Six of the eight component branches of the Wyoming State Medical Society reported. One secretary answers "One" to question 1, but further information has not been received.

Dr. Earl Whedon, Secretary of the Wyoming State Medical Society, in returning the questionnaires, states that the component societies in that state are groups of many counties, and that the five component societies reported represent the conditions all over the state.

This report was referred to the Board of Trustees.

Appointment of Committee on Public Responsibility

President Wendell C. Phillips: At the last meeting of the House of Delegates there was a supplementary report of the Reference Committee on Medical Education, as follows:

On page 117 of the Handbook, the last three lines reading "A 'Committee on the Public Responsibility of the Medical Profession' be created consisting of one member for each of the councils and bureaus and at least three additional serving for five year term," the committee recommends that for the phrase beginning with the word "consisting" the following be substituted:

Consisting of five members appointed in the usual manner, namely: Nominated by the President and elected by the House of Delegates.

It relates to several resolutions, one, two or three years ago suggesting a Board of Strategy and some other resolutions that there should be some special consideration of the public responsibilities of individual members of the medical profession.

I nominate for that committee, and I have no doubt the committee's work will develop this subject for it looks like a very far reaching subject; Dr. Ray Lyman Wilbur, Dr. Rock Sleyster, Dr. G. E. Follansbee, Dr. Harlow Brooks, and Dr. William Allen Pusey.

On motion of Dr. A. T. McCormack, Kentucky, seconded by Dr. Isaac A. Abt, Section on Diseases of Children, the nominations of the President were approved.

Letter from Conference of State and Provincial Health Authorities

The Secretary read a communication addressed to the Speaker of the House of Delegates from the Conference Secretary of the Conference of State and Provincial Health Authorities of North America, which was referred to the Reference Committee on Hygiene and Public Health.

Report on Veterans' Bureau

The Secretary read a communication similar to the one already presented by Dr. Horace M. Brown, Wisconsin, from Dr. B. W. Black, medical director of the Veterans' Bureau, with respect to an arrangement whereby the medical officers of the Veterans' Bureau may be affiliated in some capacity with the American Medical Association. This was referred to the Reference Committee on Rules and Order of Business.

Communication on Vital Statistics

The Secretary read a communication from the chief statistician for vital statistics, Bureau of the Census, having to do with the resolution introduced by Dr. C. E. Mongan, Massachusetts, two years ago concerning the differences in registration of births and deaths connected with maternity in the United States and other countries. A communication was presented to the House of Delegates last year with regard to this matter, but Dr. Mongan made the point that it did not answer the question proposed in his original resolution.

Another communication was therefore sent to the Bureau of the Census and this reply received, which was referred to the Reference Committee on Hygiene and Public Health.

Foreign Delegates

The Secretary announced the presence in Washington of delegates from the British Medical Association, the Canadian Medical Association, and from medical organizations in Mexico, Cuba, Panama, Columbia and, perhaps, other countries. It was suggested that a time be appointed for the reception and presentation of these delegates.

The Speaker announced that delegates from other countries would be received and presented to the House on Tuesday morning.

On motion of Dr. Thomas C. Chalmers, New York, seconded by Dr. W. T. Elam, Missouri, and carried, the House went into executive session at 12:25, reconvening in general session at 12:38. The meeting adjourned at 12:40.

Second Meeting — Tuesday Morning, May 17

The House of Delegates was called to order at 9:30 a. m. by the Speaker, Dr. Fred C. Warnshuis:

The Secretary read the minutes of the meeting of the House on Monday, May 16, which were approved as read.

The following distinguished guests were introduced by Dr. John O. McReynolds of Dallas, Texas, Vice President:

Mr. J. M. Penichet, professor of ophthalmology, University of Havana; Dr. Helen Ingleby; Dr. Almazon of Mexico; Dr. De Vega of Cuba, and Dr. Martin of Cuba. In an address to the House, Dr. Penichet presented the status of medicine in Cuba; on motion of Dr. William Allen Pusey, Illinois, seconded by Dr. E. S. Lain, Oklahoma, it was voted that the Secretary be instructed to send to the Cuban Medical Society a message expressing support in its fight against socialism and industrialism in medicine.

Dr. Ingleby conveyed to the House greetings from the British Medical Association.

Dr. Arthur T. McCormack, Kentucky, presented to the House of Delegates Senator Owen of Oklahoma.

Dr. J. D. Brook, Michigan, Chairman of the Committee on Credentials, announced a total registration of 149, and asked unanimous consent to waive the rule prohibiting the seating of delegates whose names had not been filed with the Secretary seven days prior to the first meeting; consent was granted, and the delegates affected, from New York and Iowa, were seated.

The Secretary read communications from Dr. Henry Boswell, delegate from Mississippi, and Dr. Seemann, delegate from Louisiana, who were prevented from attending because of flood conditions in their states.

Dr. Edward B. Heckel, Chairman of the Board of Trustees, presented the following names of cities as nominations for the place of meeting in 1928: Kansas City, Mo.; Portland, Ore.; Minneapolis, Minn.

Report of Judicial Council

Dr. M. L. Harris read the report of the Judicial Council:

To the Members of the House of Delegates of the American Medical Association:

The Council recommends that the resolution introduced by Dr. Sloan of Illinois on a proposed amendment to the principles of medical ethics be amended by inserting after the word "only" the words "Before proper medical tribunals," so that the sentence shall read: "All questions affecting the professional reputation or standing of a member or members of the medical profession should be considered only before proper medical tribunals, in executive sessions or by special or duly appointed committees on ethical relations."

The Council reports on the resolution presented by Dr. Bulson of Indiana as follows:

The members of the Judicial Council are in sympathy with the sentiments expressed in the preamble to this resolution. They feel, however, that the points raised are already well covered in section 4, article 1 of chapter 2 of the Principles of Medical Ethics. The Council concurs in the opinion that all interviews or articles of an educational nature on medical or health subjects intended for the lay press or lay audiences should give expression to the consensus of opinion of the medical profession rather than to personal views which may be in conflict therewith, and that such articles should appear preferably under the auspices of this Association, or of one of its component societies or constituent associations.

Respectfully submitted.

M. L. HARRIS, Chairman.
G. E. FOLLANSBEE.
F. W. CREGOR.
W. S. THAYER.
J. N. HALL.

On motion of Dr. M. L. Harris, duly seconded, the report of the Council was adopted.

Report of Reference Committee on Sections and Section Work

Dr. Tom B. Throckmorton, Chairman, read the report of the Reference Committee on Sections and Section Work:

To the Members of the House of Delegates of the American Medical Association:

1. The Committee on Sections and Section Work begs to report that it has carefully read and discussed the report of the Council on Scientific Assembly as printed on pages 117-118 of the Official Handbook and presented by the Chairman, Dr. J. Shelton Horsley, and recommends that the report of the Council be approved in its entirety.

2. The committee is in full accord with the traditional custom of the Council in its methods of assigning the hours of the sections so as to alternate the time of section meetings from year to year.

3. The Committee recommends that the Council do all in its power to encourage further the development of the Scientific Exhibit and collaboration between that department and various scientific sections, and would suggest the enlistment of the secretaries of the various sections in emphasizing, to those presenting scientific papers before sections, that use be made of the Scientific Exhibit as a means of furthering the work and interest of the Section.

Respectfully submitted.

TOM B. THROCKMORTON, Chairman.
ISAAC A. ABT.
J. H. CANNON.
S. P. MENGEL.
WELLS TEACHNOR, SR.

Dr. Tom B. Throckmorton, Iowa, moved that the report be adopted. The motion was seconded by Dr. Irvin Abell, Kentucky, and carried.

Report of Reference Committee on Rules and Order of Business

Dr. H. P. Linsz, West Virginia, read the report of the Reference Committee on Rules and Order of Business.

To the House of Delegates of the American Medical Association:

A letter from Winthrop Adams, to the House of Delegates, through its speaker, Dr. Frederick Warnshuis, relative to admitting physicians connected with the Veterans' Bureau and Public Health Service of the Army and Navy, to membership in the American Medical Association with dues remitted, was referred to this committee.

Your committee feels it would be unwise to admit any physicians to membership or Fellowship in the American Medical Association except through the regular channels, as prescribed in the Constitution and By-Laws of the American Medical Association.

Respectfully submitted.

H. P. LINSZ, Chairman.
F. A. CARMICHAEL.
H. B. COSTILL.
E. A. PRAY.
GEORGE R. PROCTOR.

Dr. H. P. Linsz, West Virginia, moved that the report be adopted. The motion was seconded by Dr. Henry B. Costill, New Jersey, and carried.

Report of Reference Committee on Medical Education

Dr. William Allen Pusey, Illinois, read the report of the Reference Committee on Medical Education:

To the House of Delegates of the American Medical Association:

The report records the work of the Council along the lines of its usual activities. It considers: medical schools and their history during the year; their capacity; enrolment; the number of schools; the supply of physicians; hospitals.

On these subjects the Council presents much information in this report, but particularly in the Hospital Number of THE JOURNAL, issued March 12, 1927, the Educational Number, issued Aug. 24, 1926, and in the report on Medical Licensure, in the issue of April 30, 1927. This report to the House of Delegates also considers methods of medical teaching and specialization.

Of these activities in general the committee approves, as it does also of many of the suggestions of improvement in medical education, to which the committee refers. But of some of the positions assumed as accepted and to which support is given by the tenor of the report, and of some omissions, the committee believes that some notice should be taken.

The report indicates that the schools are now operating at their full present assumed capacity. According to the findings of the Council published in THE JOURNAL, Sept. 18, 1926, which certainly must represent conditions several weeks before the beginning of the fall term, with a total enrolment of 19,500 in 1926, there were on Sept. 18, 1926, only 224 vacancies; that is less than one and one-sixth per cent of vacancies. In the freshman class there were only twenty-three vacancies; that is, with a freshman class of nearly 6,000, the vacancies then ran a little over one third of one per cent; or, with seventy-one schools, less than one vacancy to each three schools. This is capacity operation (page 107).

In spite of this showing, the report says, "Each year, however, the medical schools are increasing their capacity, whereby it is believed that most, if not all, of the properly qualified applicants will find places." In view of the above showing it would seem that this opinion of the Council is probably overoptimistic (page 107).

The report makes no further suggestion about the desirability of or necessity for increased opportunities for young men to study medicine. There is no intimation of any consideration of the problem of the possible need of a larger supply of physicians. The Commission on Medical Education, established through the Medical College Association, in its preliminary report, shows that physicians are disappearing so much more rapidly than they are being produced that it will probably be 1965—about forty years—before we see again in this country 130,000 practicing physicians, the number which it is estimated we now have, unless the opportunities for studying medicine are very considerably enlarged or the age of graduation lowered. This in spite of the fact that the population of the United States is increasing rapidly and will be about 50 per cent greater in 1965 than now—165 millions against 115 millions now (pages 38, 39). In view of these findings, it would seem that this subject is worthy of consideration and requires constructive suggestions.

The comments on supply of physicians (page 108) are limited to the fact that the number of physicians per population is larger than in European countries which it enumerates, and Japan, and that there will be less need for physicians in the future. There is no reference to the important problem of distribution, although it is our real difficulty now, and one whose importance is becoming more and more insistent from year to year, as our graduates are more and more going into cities and into special practice; in spite of the hopes that we have had for years that this distribution problem would take care of itself.

In making comparison with European countries where the number of physicians is relatively less than here, no consideration is given to the fact that in them medicine for the masses is state and industrial medicine or charity, or nonmedical substitutes such as midwives, and that for them independent personal medical service such as we are accustomed to does not exist. Also, the density of population and the size of the areas of practice make comparisons misleading.

There is no reference in the report that would indicate it has any matters of importance to consider in rural medical service. It does mention "rural districts" once in commending work of foundations in erecting hospitals "in rural districts which have a sufficiently large population to support them"—overlooking the fact that the very thing for which some of these foundations are being criticized is that they are making health programs for these communities which the communities are unable to support after the foundations withdraw their money from them, and which are frankly socialistic or state medicine.

On the subject of medical education as such, the report confines itself to comments on the recent "improvements in medical education," "revolutionized methods of treating diseases," the "present day medical course," and specialization.

The paragraphs devoted to medical education as such contain no recognition of the widespread objections to and criticism of our present medical education and, of course, no constructive suggestions as to how they should be overcome. Medical education is improving; it would be a surprising commentary if it were not; but assumptions of satisfaction with its present state without mention of its defects and the need for their remedy are at best reliance on a half truth. If there are no constructive suggestions to offer—and these are very difficult and should be offered cautiously—there is need for a statement of the defects of the situation in any presentation of it.

On the subject of the present-day medical course, the emphasis is placed on a "comprehensive course" and "no reduction in the general content of the medical course." This can only mean that the Council believes that the amount of instruction which we undertake to give in the medical school should not be lessened. In the opinion of the committee the course should be reduced materially, and we recommend careful consideration of the question of its reduction.

The comments on specialization all have the purport of favoring it. "The present-day course of medical instruction leads directly to specialization" (page 110). No mention anywhere in the report is made of training—or the necessity for training—for any other practice. Has the Council abandoned its views of the necessity for training medical men for general practice? If so, we believe it should reconsider. In our judgment the chief object of medical education should be the training of general practitioners. We believe, however, that there should be a brief course in the more important specialties in the undergraduate years—one sufficient to give an orientation of the important facts of these specialties—and that this could be provided by a drastic and intelligent reduction of the special courses. Preparation for actual practice of specialties should be altogether postgraduate and founded only on a sound general training, preferably in an internship.

The last clause of the last sentence on page 110, namely, "who will not commercialize his opportunity of finding disease when none is present," should be omitted from the report.

The recommendation of the Council under "Requirement of necropsies in hospitals approved for interns," in which insistence is placed on the importance of necropsies as an evidence of the quality of hospitals, is in our opinion wise and its importance should be emphasized.

Respectfully submitted.

J. A. WITHERSPOON.
FRED B. LUND.
J. C. LITZENBERG.
IRVIN ABELL.
WILLIAM ALLEN PUSEY, Chairman.

Dr. William Allen Pusey, Illinois, moved that the report be adopted. The motion was seconded by Dr. A. T. McCormack, Kentucky, and carried.

Report of Reference Committee on Legislation and Public Relations

Dr. E. J. Goodwin, Missouri, read the report of the Reference Committee on Legislation and Public Relations:

To the House of Delegates of the American Medical Association:

We recommend that the resolutions introduced by Drs. Blackshear of Louisiana and O'Donovan of Maryland in regard to heroin be referred to the Board of Trustees with the request that the Board secure a reinvestigation of heroin by the Council on Pharmacy and Chemistry in conjunction with

the Section on Practice of Medicine and Section on Pharmacology and Therapeutics, and that they report to the House of Delegates with recommendations.

Your Reference Committee recommends that the American Medical Association condemn as unwise and futile any attempt to evaluate a therapeutic agent by legislative fiat, referendum, popular vote, or any similar method. Such evaluation can be made only by investigation and decision of experts having knowledge of that particular subject.

We recommend that the resolution introduced by Dr. Roy of the District of Columbia concerning a medical practice act for the district be referred to the Board of Trustees for appropriate action after examination of the proposed act.

The importance and the efficiency of the Committee on Medical Relief in Disaster was graphically demonstrated in the present disastrous flood affecting the Mississippi valley. The report of Dr. Pusey, Chairman of the Committee on Medical Relief in Disaster, shows that the American Red Cross, the United States Public Health Service, the American Medical Association, the state health departments, and the state and county medical associations, acting as a unit, have provided medical personnel wherever the emergency has demanded. The promptness and economy with which medical relief was extended by those states and counties with active medical societies and disaster relief committees and organized health bodies is noteworthy. Your committee recommends that the Association urge that constituent associations and component societies which have not already established disaster relief committees do so as soon as possible.

Respectfully submitted.

B. R. SHURLY.
A. T. MCCORMACK.
A. D. DUNN.
E. J. GOODWIN, Chairman.

Dr. E. J. Goodwin, Missouri, moved that the report be adopted. The motion was seconded by Dr. A. T. McCormack, Kentucky, and carried.

Report of Reference Committee on Hygiene and Public Health

Dr. H. M. Brown, Wisconsin, read the part of the report of the Reference Committee on Hygiene and Public Health:

To the Members of the House of Delegates of the American Medical Association:

The Reference Committee on Hygiene and Public Health calls the attention of the American Medical Association to the fact that the classifications of deaths associated with the puerperal state, followed by Registrar General of England and Wales, differs widely from that followed by the United States Census Bureau.

Comparative statements of maternal mortality between the two nations cannot therefore be accurate or dependable.

Your committee on Hygiene and Public Health recommends that the House of Delegates bring this matter to the attention of the United States Census Bureau and urge the importance of securing a strictly uniform definition of maternal mortality by the bureaus of vital statistics of the several nations.

Dr. H. M. Brown, Wisconsin, moved that the report be adopted. The motion was seconded by Dr. Isaac A. Abt, Section on Diseases of Children, and carried.

Dr. H. M. Brown, Wisconsin, read that part of the report of the committee referring to communications from Dr. Matthias Nicoll regarding relations between medical men and health officers. Dr. H. M. Brown, Wisconsin, moved that the report be adopted. The motion was seconded by Dr. A. T. McCormack, Kentucky. On motion of Dr. Isaac A. Abt, Section on Diseases of Children, seconded by Dr. N. B. Van Etten, New York, and carried, that section of the report was recommitted to the Committee on Hygiene and Public Health.

Dr. H. M. Brown, Wisconsin, read the part of the report dealing with toilet preparations:

Your reference committee considers the underlying principle of the resolution of Dr. Wightman to be correct and laudable and that the matter be referred to the Board of Trustees for action.

HORACE M. BROWN, Chairman.

Dr. H. M. Brown, Wisconsin, moved that the committee's report referring the matter to the Board of Trustees be adopted; seconded by Dr. B. L. Eiker, Iowa. The subject was discussed by Drs. Orrin S. Wightman, New York; D. E. Sullivan, New Hampshire; Orlando H. Petty, Pennsylvania; John E. Lane, Connecticut; Daniel Dougherty, New York; Holman Taylor, Texas, and Dr. H. M. Brown, chairman of the committee. The motion to adopt the report referring the subject to the Board of Trustees was carried.

Report of Reference Committee on Amendments to the Constitution and By-Laws

Dr. Holman Taylor, Texas, read the report of the Reference Committee on Amendments to the Constitution and By-Laws:

To the Members of the House of Delegates:

The Reference Committee on Amendments to the Constitution and By-Laws begs leave to make the following report:

We recommend that section 1, article 5, of the Constitution of the American Medical Association be amended so as to read as follows:

SECTION 1.—The legislative powers of the Association reside in the House of Delegates. The House of Delegates shall transact all business of the Association not otherwise specifically provided for in this Constitution and By-Laws, and shall elect the general officers. It shall have the power to discipline or expel a member of the American Medical Association or a Fellow of the Scientific Assembly on recommendation of the Judicial Council.

That section 1, chapter IX, of the By-Laws, amended so as to read as follows:

SECTION 1.—THE JUDICIAL COUNCIL.—The judicial power of the Association shall be vested in the Judicial Council, whose decision shall be final. This power shall extend to and include (1) all questions involving membership in the American Medical Association or Fellowship in the Scientific Assembly; (2) all controversies arising under this Constitution and By-Laws, to which the American Medical Association is a party; and (3) controversies (*a*) between two or more recognized constituent associations, (*b*) between a constituent association and a component society or societies of another constituent association or associations or a member or members of another constituent association or other constituent associations, and (*c*) between members of different constituent associations. In all these cases the Judicial Council shall have original jurisdiction.

In all cases which arise (*a*) between a constituent association and one or more of its component societies; (*b*) between component societies of the same constituent association; (*c*) between a member or members and the component society to which said member or members belong, or (*d*) between members of different component societies of the same constituent association, the Judicial Council shall have appellate jurisdiction in questions of law and procedure, but not of fact.

The Judicial Council shall have jurisdiction on all questions of ethics and in the interpretation of the laws of the organization.

The Judicial Council may, at its discretion, investigate general professional conditions and all matters pertaining to the relations of physicians to one another and to the public, and may make such recommendations to the House of Delegates or the constituent associations as it deems necessary.

It is recommended that section 4, chapter IV, of the By-Laws, be amended to read as follows:

SECTION 4.—TIME OF ELECTION.—The election of officers shall be the order of business of the House of Delegates immediately following the final supplementary reports of the Board of Trustees and Committees, on the afternoon of the fourth day of the Annual Session of the House of Delegates (Thursday); provided, however, that the House of Delegates may change the time of election by action taken at least one day in advance of that to which the election is to be changed, and provided further that the motion to change the time of election shall be supported by two thirds of the delegates registered.

The election of Affiliate, Associate and Honorary Fellows shall immediately follow the election of officers. Not more than three Honorary Fellows shall be elected at any annual session, except on special recommendation of the Council on Scientific Assembly and the unanimous vote of the House.

The following proposed amendment to article 10 of the Constitution, appearing in the annual report of the Secretary, has been referred to this Committee:

The House of Delegates and the Scientific Assembly shall meet annually at times and places to be fixed by the Board of Trustees. A session may be held at any place in the United States.

We respectfully substitute the following and recommend its adoption:

ARTICLE 10.—The House of Delegates and the Scientific Assembly shall meet annually at times and places to be fixed by the House of Delegates. Places desiring to entertain the House of Delegates and the Scientific Assembly in annual session shall submit their invitations in writing, together with such data as may be required, to the Board of Trustees, not less than sixty days prior to the annual session at which the selection of the place of meeting is to be made. The Board of Trustees shall investigate or cause to be investigated all such places from which said invitations have been received, and shall make report to the House of Delegates, advising which, if any, of said places possess, or

may be expected to furnish, the necessary facilities and conveniences for entertaining the Association and accommodating its various activities. The time and place of any of these sessions may, however, be changed by the unanimous action of the Board of Trustees at any time not less than sixty days prior to the time selected for that session. A session may be held at any place in the United States.

Respectfully submitted.

HOLMAN TAYLOR, Chairman.
S. W. WELCH.
L. H. MCKINNIE.
W. R. STEINER.
C. T. PIGOT.

Dr. Holman Taylor, Texas, moved that the portion relating to amendments to article V, section 1 of the Constitution and section 1, Chapter IX, of the By-Laws be adopted. The motion was seconded by Dr. Albert E. Bulson, Jr., Indiana, and carried. Dr. Taylor then moved that the amendment to section 1, article V, of the Constitution be adopted; seconded by Dr. Bulson, Indiana. The subject was discussed by Drs. E. C. Thrash, Georgia; Daniel S. Dougherty, New York; Thomas C. Chalmers, New York; A. T. McCormack, Kentucky; M. L. Harris, Judicial Council; J. Richard Kevin, New York; J. W. Van Derslice, Illinois; George E. Follansbee, Ohio; L. L. Sheddan, Tennessee; Isaac A. Abt, Section on Diseases of Children; Charles O'Donovan, Maryland; Holman Taylor, Texas, and William Allen Pusey, Illinois. Dr. Pusey moved that the matter be put over for consideration to next year; seconded by Dr. J. Richard Kevin of New York. The motion when put to vote was lost. The motion to adopt the amendment was announced carried by a vote of 100 affirmative, 18 negative.

Dr. Taylor moved the adoption of the amendment to section 1, chapter IX, of the By-Laws; seconded by Dr. Arthur J. Bedell, New York, and carried.

Dr. Taylor moved the adoption of that part of the report referring to the amendment to section 4, chapter IV, of the By-Laws; seconded by Dr. L. J. Hirschman, Michigan; discussed by Drs. J. W. Van Derslice, Illinois; Holman Taylor, Texas; H. D. Wood, Arkansas, and carried.

Dr. Taylor moved the adoption of that part of the report referring to the proposed amendment to article 10 of the Constitution; seconded by Dr. John P. DeWitt, Ohio; discussed by Drs. J. W. Van Derslice, Illinois; Holman Taylor, Texas; McLain Rogers, Oklahoma; Arthur J. Bedell, New York, and carried.

The report of the committee was adopted as a whole on motion of Dr. Holman Taylor, Texas, seconded by Albert E. Bulson, Jr., Indiana, and carried.

The Speaker asked for the opinion of the House with reference to the elections on Thursday afternoon, and it was voted, on motion of Dr. Holman Taylor, Texas, seconded by Dr. S. W. Welch, Alabama, that in accordance with the amendment just adopted the elections take place following the business of the House and the reports of Reference Committees.

Report of Reference Committee on Reports of Officers

Dr. J. Norman Henry, Pennsylvania, presented the report of the Reference Committee on Reports of Officers:

To the Members of the House of Delegates of the American Medical Association:

The committee notes with approval the remarks of the Speaker in regard to the impartiality of the appointment of the reference committee and the handicap under which the Speaker functions because of the incompleteness of the lists of delegates submitted to him. It is suggested that the state organizations should follow some method of appointment that would permit of a complete list at least thirty days before the meeting of the parent body.

The nursing problem has already been referred to a committee and needs no consideration from this reference committee other than to endorse the principle that the matter shall be handled through the channels of organized medicine.

In the same spirit the committee commends the Speaker's reference to the duty of the American Medical Association to standardize and to elevate the practice of medicine and surgery within and without hospitals through efforts of our own association but not through legislative or other agencies. This desirable result may be accomplished through already existing committees, and the appointment of another body might well result in duplication of effort.

The committee cordially seconds the Speaker's reference to the responsibility of the delegate in whom rests collectively and individually the strength and welfare of our Association.

The President deals in the opening of his address with the responsibility of the physician and his relation in matters of concern to the public health. Particularly does he dwell on the duty of the physician in the question of the authoritative education of the public through the means of the press and the radio broadcast. While fully recognizing this duty, the committee feels that the same rule of ethics that governs newspaper publicity should apply to broadcasting and that the necessary instruction of the public can be obtained without the appearance of the individual broadcaster's name. Such principle is in force in many states and the result is obtained without personal exploitation.

The committee is in accord with the views expressed with regard to value of health conferences, and also of the survey of public health activities particularly if the principle of seeking to reduce multiplication of similar efforts be made the keynote of such meetings.

The committee strongly endorses the remarks of the President with respect to the importance of the cooperative work of the Woman's Auxiliary and trusts that his recommendation that county and state societies should encourage these auxiliaries in all ways in their power shall be carried out.

The committee recognizes the valuble suggestion made by the President-Elect as to the value of moral training of those pursuing the study of medicine, and recommends that the suggestion of the introduction of courses on medical ethics be adopted in medical schools throughout the country.

Of interest is the formula by which the Judicial Council suggests that a given contract for medical services may be pronounced ethical or the reverse. The committee approves of this method in general, and agrees with the Council that each individual contract must be judged on its own merits.

The committee understands that the last part of the report of the Judicial Council dealing with membership and expulsion had been given to another committee for consideration.

Inasmuch as the Reference Committee on Reports of Officers has been informed during its first meeting that the addresses of the officers have already been published in THE JOURNAL and in the public press, it finds difficulty in commenting on these reports in any detail. The committee makes this suggestion that this procedure should be modified so that future reference committees should have the opportunity of passing on addresses referred to them before they are given any publicity either in THE JOURNAL or in public print. The reason for this recommendation is obvious for reasons of policy, for in this way only may these reports go forth with the added authority of the House of Delegates.

Respectfully submitted.

CHARLES E. HUMISTON, Chairman.
JAMES N. VANDER VEER.
J. NORMAN HENRY.
WILLIAM G. RICKER.
ALBERT E. BULSON, JR.

Action on the report was taken as follows:

Section 1. Speaker's address. Portion referring to appointment of reference committees thirty days prior to the annual session adopted on motion of Dr. Henry, seconded by Dr. Arthur J. Bedell, New York.

Portion referring to handing of nursing training through medical channels: The motion made by Dr. Henry, seconded by Dr. L. H. McKinnie, Colorado, to adopt the report was lost.

Portion recommending creation of a commission to establish standards of surgery or surgical practice was adopted by motion of Dr. Henry, seconded by Dr. L. J. Hirschman, Michigan.

Section 2. President's address: Portion referring to radio broadcasting. Dr. Henry moved the adoption of the report; seconded by Dr. J. N. Hunsberger, Pennsylvania; discussed by Drs. A. T. McCormack, Kentucky, President Wendell C. Phillips; Holman Taylor, Texas, and carried.

Portion referring to health conferences by various affiliated associations was adopted on motion of Dr. Henry, seconded by Dr. A. T. McCormack, Kentucky, and carried.

Section 3. Report of the Judicial Council: Dr. Henry moved the adoption of the portion referring to contract practice; discussed by Dr. Seale Harris, Alabama, who gave notice of intention to present a resolution to be published thirty days preceding the next annual session adding to the effectiveness of the report of the Judicial Council; discussed further by Drs. Charles E. Humiston, Illinois, Chairman of the Reference Committee on Reports of Officers; J. N. Hunsberger, Pennsylvania, and adopted.

Section 4. Dr. Henry read the conclusion of the report of the Committee on Reports of Officers, with respect to publishing the address of the officers prior to the annual session, and moved its adoption; seconded by Dr. Arthur J. Bedell, New York; discussed by Dr. Holman Taylor, Texas; the Secretary, Dr. Olin West; Drs. J. Norman Henry, Pennsylvania; Dr. John E. Lane, Connecticut; William G. Ricker, Vermont; Irvin Abell, Kentucky; Charles E. Humiston, Illinois; Albert E. Bulson, Jr., Indiana, and the editor of THE JOURNAL, Dr. Morris Fishbein; the motion to adopt this portion of the report was lost.

The report of the Committee on Reports of Officers was adopted as a whole, on motion of Dr. Henry, seconded by Dr. Walter F. Donaldson, Pennsylvania, with the exception of the two sections that were not adopted.

Reference Committee on Reports of Board of Trustees and Secretary

Dr. Arthur W. Booth, New York, announced that the Reference Committee on Reports of the Board of Trustees and the Secretary was not ready to report.

Report of Reference Committee on Miscellaneous Business

Dr. Albert Soiland, California, read the report of the Reference Committee on Miscellaneous Business:

The resolution introduced by Dr. Bulson regarding the place of holding the annual session was adopted on motion of Dr. Albert Soiland, California, seconded by Dr. J. N. Hunsberger, Pennsylvania.

The resolution introduced by Dr. Bulson with respect to charges for services to insurance and indemnity companies was adopted on motion of Dr. Albert Soiland, California, seconded by Dr. J. N. Hunsberger, Pennsylvania.

Dr. Albert Soiland, California, read the section of the Committee's report relative to approval of the amendment to the U. S. revenue bill:

Your committee feels that the preamble and resolution introduced by Dr. Hines is of sufficient importance to warrant careful and favorable consideration by the Board of Trustees of the American Medical Association, and it herewith recommends that the Board of Trustees transmit this resolution to the constituent state societies for action.

By the Committee. ALBERT SOILAND, Chairman.

Dr. Albert Soiland, California, moved that this section of the report be adopted; seconded by Dr. J. N. Hunsberger, Pennsylvania. The motion to adopt the report, which carried with it reference to the Board of Trustees, was carried.

The report of the Committee as a whole was adopted.

By unanimous consent, at the suggestion of Dr. A. T. McCormack, Kentucky, the committee reports on which formal action was not taken to adopt them as a whole were considered so adopted.

Report of Special Reference Committee on Nursing Education

Dr. Irvin Abell, Kentucky, presented the report of the Special Committee on Nursing Education, reading first the report of the Committee on Grading of Nursing Schools which had not previously been presented to the House:

To the Speaker and Members of the House of Delegates, American Medical Association:

Your committee has carefully reviewed the published report of the Committee on Nurses and Nursing Education as created by the 1926 House of Delegates and has had the privilege of studying the formal report presented by Dr. William Darrach of New York, chairman of the Committee on the Grading of Nursing Schools, the committee which was an outgrowth of resolutions referred to the Council on Medical Education and Hospitals in 1923. The latter committee is composed of representatives of the following national organizations:

The American Nurses' Association.
The American Medical Association.
The American Hospital Association.
The American College of Surgeons.
The American Public Health Association.
The National League of Nursing Education.
The National Organization for Public Health Nursing.

The published report of the Committee on Nurses and Nursing Education demonstrates that the committee in the brief time at its disposal has thoroughly uncovered the dimensions of the problem. Your reference committee, impressed with the many phases of the subject as brought out in the published report, agrees that the problem concerns not only the medical profession and the nursing profession but, most of all, the public at large. We therefore believe that the American Medical Association is fortunate in being associated with the larger committee above mentioned, which is already engaged in the solution of the problem, especially since it is so well represented in that committee by Dr. William Darrach and Dr. N. B. Van Etten. Your reference committee is convinced that the many fundamental weaknesses in the present training program for nurses and the economic difficulties under which graduate nurses are working cannot be corrected until a more exhaustive review of the field has been completed.

We therefore recommend to this House:

First. The acceptance and filing of the report of the Committee on Nurses and Nursing Education; and

Second. The adoption of the following recommendation in the report submitted by Dr. Darrach, chairman of the Committee on the Grading of Nursing Schools, namely:

That the American Medical Association give earnest support in the work of the Committee on the Grading of Nursing Schools and share in the financial program of the work to the extent of $5,000 a year for a period of five years, unless the work should be completed before that time.

Respectfully submitted.

WALTER F. DONALDSON.
LOUIS J. HIRSCHMAN.
ARTHUR J. BEDELL.
E. P. SLOAN.
IRVIN ABELL, Chairman.

Dr. Irvin Abell, Kentucky, moved the adoption of the report; seconded by Dr. Arthur J. Bedell, New York, and carried.

The Speaker referred the report to the Board of Trustees because it entailed an appropriation.

Report on Visiting of County Societies

Dr. Victor G. Vecki, California, moved that the Board of Trustees be asked to report on a resolution presented by him at the 1925 session in Atlantic City having to do with visits to local county and state societies. The motion was seconded by Dr. A. T. McCormack, Kentucky, and carried.

NEW BUSINESS

Resolutions on Physicians' Home

The following resolution was presented by Dr. J. Richard Kevin, New York, and referred to the Reference Committee on Miscellaneous Business:

WHEREAS, The Physicians Home, Inc., six years established in its first eastern unit in New York State, providing for the upkeep and care of incapacitated physicians throughout the United States has appreciated the grave necessity for this magnanimous work; and

WHEREAS, The House of Delegates several years ago recognized this field of helpfulness and by the unanimous vote endorsed the project; and

WHEREAS, The Board of Trustees of the Physicians Home, Inc., recognizing that this whole field of usefulness should be turned over to the American Medical Association for the most successful maintenance of the institution with a view to such homes being established in various sections of the United States; therefore, be it

Resolved, At the request of the Board of Directors of the Physicians Home, Inc., that the House of Delegates recommend to the Board of Trustees of the American Medical Association the acceptance of all real estate, securities and income now in the possession of said Physicians Home, Inc., without remuneration; that while the American Medical Association functions most efficiently for the protection and support of the public, we must not forget that primarily the American Medical Association owes a supreme debt of support to the unfortunate incapacitated physicians.

Resolutions on Form Letters on Periodic Examinations

Dr. C. S. Gorsline, Michigan, presented the following resolution, which was referred to the Reference Committee on Hygiene and Public Health:

WHEREAS, At the Dallas session of the House of Delegates in 1926 the Board of Trustees was requested by resolution to prepare sets of carefully worded letters as approved models or forms to be sent out by the various county societies to their members and to the lay public in reference to extending and promoting the value of periodic health examinations; and

WHEREAS, At this session there has been presented by said Board only a ruling of the Judicial Council that letters, etc., from individual physicians or groups of physicians which might be construed as soliciting business would be unethical; be it

Resolved, That the Board of Trustees be again requested to prepare approved forms of letters which may be sent out by either county medical societies or county and state health officers to promote to the public the value of periodic health examinations and that said examinations can be made and kept by their own qualified local physicians who are members of the American Medical Assocation, and in this manner help to circumvent the harmful advertising activities of commercial agencies dealing with periodic health examinations.

Resolution on Disabled Medical Officers

Dr. T. E. Carmody, Colorado, introduced the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The House of Delegates, American Medical Association, unanimously adopted the following resolution at its St. Louis meeting, May 25, 1922:

RESOLUTION FOR RETIREMENT OF DISABLED EMERGENCY ARMY OFFICERS

WHEREAS, The disabled emergency officers of the army are not receiving the same treatment as the other eight classes of disabled officers who served during the World War in that they are denied the privileges of retirement for physical disability as allowed all other disabled officers, regular and emergency alike; and

WHEREAS, It is obviously unjust and discriminatory to deny to one class of disabled officers the rights and privileges accorded all other classes; and

WHEREAS, There is pending in Congress now legislation to correct this discrimination; therefore, be it

Resolved, That the House of Delegates of the American Medical Association urges on the House of Representatives the passage of the Bursum bill at the earliest possible date to the end that the disabled emergency officers may receive the treatment to which they are entitled.

WHEREAS, Legislation mentioned in the foregoing resolution, still pending in the Sixty-Ninth Congress, was known as the Tyson-Fitzgerald bill; and

WHEREAS, Legislation of similar text and purpose will be presented to the Seventieth Congress; therefore, be it

Resolved, That the House of Delegates, Seventy-Eighth Annual Session, American Medical Association, in convention this 17th day of May, 1927, at Washington, D. C., does hereby heartily reaffirm the favorable action taken in previous convention in endorsing the principles of retirement for disabled emergency army officers on a parity with all other classes of disabled officers of the World War now on retired lists; and be it further

Resolved, That copies of this resolution be transmitted to the President of the United States, to the Vice President of the United States, and to the Speaker of the House of Representatives of the United States.

Resolution on Parker and Ransdall Bills

Dr. E. J. Goodwin, Missouri, moved that the House reaffirm its approval of the Parker bill and include approval of the Ransdall bill. The Speaker referred the matter to the Committee on Legislation and Public Relations for action at the next meeting of the House.

Resolution on D. P. H. Degree

Dr. Southgate Leigh, Virginia, introduced the following request, which was referred to the Committee on Hygiene and Public Relations:

The Medical Society of Virginia requests the opinion of the House of Delegates as to the advisability of permitting men who hold the degree of Doctor of Public Health, and who are not graduates of medicine, to be appointed to the position of local health officer.

Presentation in Synopsis of Convention Proceedings

It was moved by Dr. Orrin S. Wightman, New York, that a brief synopsis of the proceedings of the present annual session featuring the matters of general interest be prepared by the Publicity Committee under Dr. Fishbein and be sent to the state journals within the next thirty days.

A motion was made by Dr. A. T. McCormack, Kentucky, that when the House adjourn, it adjourn to meet on Wednesday morning at 9 o'clock; seconded by Dr. Edward Livingston Hunt, New York, and carried.

The Speaker ruled that new business could be introduced at the Wednesday morning session.

Communication from National League of Nursing Education

The Secretary read the communication from the National League of Nursing Education, which was referred to the Special Committee on Nurses' Training and Service:

NATIONAL LEAGUE OF NURSING EDUCATION

May 13, 1927.

Dr. Olin West, Secretary, American Medical Association:

The National League of Nursing Education and the National Organization for Public Health Nursing are receiving an increasingly large number of communications concerning the lack of medical care for maternity patients in isolated, rural districts. The many public health nurses who are working in these sparsely settled areas, especially in the South, Southwestern and Northwestern states, find many women who have been delivered without any medical care and frequently with disastrous results. Furthermore, these rural nurses themselves are often called on to attend deliveries, when there is no medical aid available. These nurses are, of course, greatly disturbed by having this work thrust upon them without having had proper training or without license to do such work. An increasingly large number of nurses, working in these isolated districts, are making inquiries as to where suitable training in midwifery may be obtained.

The boards of directors of the National League of Nursing Education and the National Organization for Public Health Nursing have appointed a committee to study this matter. The committee believes that the first step to be taken is to secure the cooperation of the American Medical Association in the consideration of any plan for training qualified public health nurses to become midwives.

Appreciating the success which has attended the plan in England of licensing nurse midwives and the support which that has had from the medical profession, and deploring the burdens which are being put upon nurses in this country, without adequate preparation, the establishment of a few centers where such teaching might be given seems indicated.

The annual meeting of the National League of Nursing Education will be held June 6-10 next, at Cliff Hotel, San Francisco, California, when a preliminary report will be presented, as well as a round table discussion on the preparation of the obstetrical nurse held.

The committee feels very keenly that both the medical and the nursing groups in this country should formulate some plan which will safeguard the lives of mothers in these isolated districts and will, therefore, greatly appreciate an expression of opinion from the American Medical Association concerning this proposed study for presentation at this session.

ELIZABETH F. MILLER,
Chairman of Committee to Study Need of Midwifery for Nurses.

The meeting adjourned at 1:45.

(To be continued)

REGISTRATION AT WASHINGTON

The total registration at the Washington Session was 6,273. Below are given two summaries, one by sections and one by states:

REGISTRATION BY SECTIONS

Practice of Medicine	1,805
Surgery, General and Abdominal	1,018
Obstetrics, Gynecology and Abdominal Surgery	342
Ophthalmology	416
Laryngology, Otology and Rhinology	393
Diseases of Children	362
Pharmacology and Therapeutics	59
Pathology and Physiology	163
Nervous and Mental Diseases	171
Dermatology and Syphilology	167
Preventive and Industrial Medicine and Public Health	194
Urology	224
Orthopedic Surgery	167
Gastro-Enterology and Proctology	112
Radiology	246
Miscellaneous	434
Total	6,273

REGISTRATION BY STATES

Alabama	50	Nevada	1
Arizona	4	New Hampshire	8
Arkansas	12	New Jersey	206
California	103	New Mexico	5
Colorado	47	New York	763
Connecticut	96	North Carolina	161
Delaware	21	North Dakota	6
District of Columbia	705	Ohio	372
Florida	34	Oklahoma	34
Georgia	60	Oregon	24
Idaho	7	Pennsylvania	897
Illinois	269	Rhode Island	34
Indiana	112	South Carolina	47
Iowa	51	South Dakota	4
Kansas	36	Tennessee	94
Kentucky	59	Texas	113
Louisiana	37	Utah	8
Maine	27	Vermont	16
Maryland	420	Virginia	394
Massachusetts	235	Washington	8
Michigan	169	West Virginia	120
Minnesota	99	Wisconsin	62
Mississippi	16	Wyoming	6
Missouri	114	Foreign	65
Montana	9		
Nebraska	33	Total	6,273

Medical News

(PHYSICIANS WILL CONFER A FAVOR BY SENDING FOR THIS DEPARTMENT ITEMS OF NEWS OF MORE OR LESS GENERAL INTEREST: SUCH AS RELATE TO SOCIETY ACTIVITIES, NEW HOSPITALS, EDUCATION, PUBLIC HEALTH, ETC.)

ARKANSAS

Doctor Vinsonhaler Appointed Dean.—At a meeting of the board of trustees of the University of Arkansas, Little Rock, May 5, Dr. Morgan Smith resigned as dean of the school of medicine, effective, July 1, and Dr. Frank Vinsonhaler, Little Rock, was appointed to that position. Dr. Vinsonhaler is professor of diseases of the eye, ear, nose and throat at the medical school, and a member of the American Board of Ophthalmology.

CALIFORNIA

State Medical Election.—At the annual meeting of the California Medical Association, April 25-28, Dr. Percy T. Phillips, Santa Cruz, was elected president; Dr. William H. Kiger, Los Angeles, president-elect, and Dr. Thomas Henshaw Kelly, San Francisco, vice president. The council reappointed Dr. Emma W. Pope, San Francisco, secretary.

COLORADO

Society News.—The Larimer County Medical Society entertained the Weld County Medical Society at Loveland, recently; among the speakers was Dr. George P. Lingenfelter, Denver, whose subject was "Physiotherapy."

Health Week.—Denver had its attention called to the importance of health, in the observance of "Health Week," April 24 and May 1, through newspapers, motion pictures, radio exhibits, clinics and speeches. More than twenty-two civic and social agencies cooperated. The general chairman was Dr. James J. Waring; the assistant chairman, Dr. Bertram B. Jaffa, and the acting chairman, Dr. George Walter Holden.

CONNECTICUT

Personal.—Dr. John H. Foster, who recently left China because of the disturbed conditions, plans to go into practice in Waterbury, it is reported. Dr. Foster's address was given as Farmington, Maine.——Dr. Jerome S. Chaffee has been appointed health officer of Sharon.

Large Gift to Yale.—The General Education Board, New York, a part of the Rockefeller Foundation, has pledged a gift of $850,000 to Yale University School of Medicine on condition that a new endowment of $1,150,000 is secured from other sources. The gift was made in the course of the campaign for $20,000,000 being conducted for the university. Abraham Flexner, Ph.D., of the General Education Board, is reported to have said that the gift was offered in recognition of work done at Yale in research and teaching.

The Dodge Lectures.—Sir George Newman, chief medical officer of the British ministry of health, gave four lectures under the Dodge Foundation at Yale University, New Haven, beginning May 23, on the general subject of "Citizenship and the Survival of Civilization." Dr. Newman throughout the lectures illustrated the responsibilities of citizenship by considering their relation to medicine. Lectures under the Dodge Foundation have been given in previous years by William H. Taft, Elihu Root, Lord Bryce and Charles E. Hughes.

State Medical Meeting.—The one hundred and thirty-fifth annual meeting of the Connecticut State Medical Society was held at Hartford, May 25-26, under the presidency of Dr. Frank H. Wheeler, New Haven. Clinics and ward rounds were held at the St. Francis Hospital and the Hartford Hospital each morning, and many scientific papers were presented by physicians of the state with the exception of a paper on the "Treatment of Anemia" by Drs. George R. Minot and William P. Murphy of Boston, and a paper on "Diagnosis and Treatment of Acute and Chronic Empyema of the Maxillary Sinus" by Dr. Joseph D. Kelly, New York. The Hartford City Medical Society entertained the members of the state society at a supper, Wednesday evening, and the annual dinner was held the following evening.——The Connecticut State Medical Society will hold its third clinical congress, September 20-22; the registration fee will be $5. All physicians are invited, and inquiries should be addressed to Dr. Creighton Barker, 129 Whitney Avenue, New Haven.

DISTRICT OF COLUMBIA

Physicians' Portraits.—The senior class of George Washington University Medical School, at a meeting in the auditorium of the District of Columbia Medical Society, April 14, presented to the school oil portraits of the dean, Dr. William C. Borden, and of Dr. John Wesley Bovee, formerly a professor. The president of the university, William M. Lewis, LL.D., accepted the portraits on behalf of the medical school.

FLORIDA

State Society Commends Newspaper.—At the fifty-fourth annual meeting of the Florida Medical Association, West Palm Beach, April 5-6, the house of delegates adopted a resolution commending the Tampa *Morning Tribune* for taking steps to bar quack medical advertising from its pages. The resolution was as follows:

WHEREAS, It has come to the attention of organized medicine that one of the most important newspapers of the state, the Tampa *Morning Tribune*, has taken steps to bar all quack medicine advertising, and all other advertising which in their opinion tends to deceive the public, therefore be it

Resolved, That the Florida Medical Association heartily endorse this step forward in the interests of the public, and that we, individually, and collectively, pledge our support to the publisher, Mr. S. E. Thomason, Tampa, Florida; that the secretary so notify Mr. S. E. Thomason and send him a copy of this resolution; that the secretary advise the various societies of the state association of this action that they may aid in securing like action from the publishers of various local papers; be it further

Resolved, That any other newspaper having taken a similar stand, or in the future taking such a stand, be commended by the Florida Medical Association.

GEORGIA

Society News.—Dr. Champneys H. Holmes, Atlanta, addressed the Fulton County Medical Society, April 21, on "Home Treatment of Tuberculosis," and Dr. James L. Campbell, Atlanta, on "Surgery of the Blood Vessels"; Dr. Rudolph A. Bartholomew addressed the society, May 5, on "Prophylactic External Version."

State Medical Election.—At the seventy-eighth annual meeting of the Medical Association of Georgia, Athens, May 13, Dr. William A. Mulherin, professor of pediatrics, University of Georgia Medical Department, Augusta, was elected president to succeed Dr. Virgil O. Harvard, Arabi, and Drs. Henry M. Fullilove, Athens, and Cleveland Thompson, Millen, were elected vice presidents. The secretary is Allen H. Bunce, Atlanta. The next annual meeting will be held at Savannah. Mrs. Paul L. Holiday, Athens, was elected president of the Woman's Auxiliary of the state medical association, and Mrs. Charles C. Hinton, Macon, president-elect.

All Dental Defects Corrected.—Every white child in the public schools of Athens has obtained a certificate from a dentist stating that all necessary dental work has been completed. The city health commissioner and the director of the Athens Child Health Demonstration state that Athens is the first city to achieve this record. The campaign has progressed to completion since about January 1, following a conference of the departments of health and education and the dentists. There were talks and the distribution of literature in the schools, clubs and churches. The results are attributable, however, largely to the efforts of the school teachers and the cooperation of others concerned. The dentists did much work without charge. Frank C. Wilson, D.D.S., president, Georgia State Dental Society, presented the mayor of Athens with a certificate commemorating the achievement.

HAWAII

Twelve Lepers Paroled.—Following an examination which resulted in the disease being pronounced arrested, twelve patients will soon leave the Kalaupapa leper colony on parole. The Chicago *Tribune* notes that nearly all of them will return to the settlement as employees; two will go to the Philippines, and one each to China, Japan and Corea. Twenty-seven patients in all applied for parole.

Annual Medical Meeting.—The second annual meeting of the Hawaii Territorial Medical Association was held at Queen's Hospital, Honolulu, April 30-May 2, under the presidency of Dr. Archibald N. Sinclair. Among the speakers were Dr. Forest J. Pinkerton on "Chloroform Anesthesia in 10,044 Surgical Operations"; Dr. Carl F. Reppun, "An Analysis of Eclampsia at the Queen's Hospital"; Dr. Gideon M. Van Poole, "Brain Abscess of Otitic Origin"; Dr. Fred K. Lam, "A Survey of Clonorchiasis." There was a clinic on leprosy at the Kalihi Hospital by Dr. Mather H. Neill, and a picnic and a ball game on Sunday.

IDAHO

Personal.—Dr. Reilly J. Alcorn, Sandpoint, has been appointed chief surgeon of the Alaska railway at the base hospital in Anchorage, Alaska, succeeding Dr. Arthur D. Haverstock who has been transferred to Vancouver.——The physicians of Pocatello gave a banquet recently in honor of Drs. Hubert A. Castle and Clayton A. Hoover, Blackfoot, both of whom have practiced in Idaho for many years.

ILLINOIS

Liquor Licenses Revoked.—The district prohibition administrator with headquarters in Chicago recently revoked the liquor permits of the following for violation of the prohibition law and regulations:

Dr. Milton B. Gevirtz, Calumet City.
Dr. Mardiros H. Derian, Calumet City.
Dr. Louis Tillery, Chicago.

Chicago

Dr. Billings Honored.—The French government recently conferred the cross of officer of the Legion of Honor on Dr. Frank Billings, in recognition of his work in connection with the memorial to Pasteur to be erected in Chicago. Dr. Billings, it has been announced, will be the orator at the convocation of the University of Chicago, June 14; his subject will be "Medicine and Human Progress."

Municipal Tuberculosis Sanitarium.—Dr. Benjamin Goldberg, who was recently appointed a member of the board of trustees of the Chicago Municipal Tuberculosis Sanitarium, has been elected secretary of the board. The sanatorium proper has a staff of twelve physicians and will have, when the addition under construction is completed, a capacity of more than 1,200 beds. There are also eight dispensaries located in the congested districts, with a registration of 35,340 patients, and a staff of twenty-nine physicians, in addition to the fifty school tuberculosis physicians on the sanatorium pay roll.

University News.—The entire collection of books and periodicals on surgery of the late Dr. Albert E. Halstead has been donated by his widow to Northwestern University Medical School; they will be installed in a seminar room adjoining the Archibald Church Memorial Library and will be known as the "Albert Edward Halstead Surgical Library."——Mr. G. Herbert Jones, director, Inland Steel Company, has given $250,000 more toward the construction of the George Herbert Jones Chemistry Laboratory at the University of Chicago. Mr. Jones gave $415,000 for the chemistry building last December.

KANSAS

Health Officer Resigns.—Dr. Ira O. Church, health officer of Topeka, has tendered his resignation, effective, May 31, in order to accept the position of health officer of Chaves County, New Mexico, with headquarters at Roswell.

State Medical Election.—Dr. John A. Dillon, Larned, was elected president of the Kansas Medical Society at the annual meeting, Hutchinson, May 3-5, Dr. Johnathan B. Carter, Wilson, vice president, Dr. George M. Gray, Kansas City, treasurer, and Dr. John F. Hassig, Kansas City, secretary, reelected for two years.

MASSACHUSETTS

Harvard Students Must Be Vaccinated.—At a meeting of the overseers of Harvard University, May 9, it was voted to require a certificate of successful vaccination from all new students allowed to register in any department of the university, beginning with the academic year 1927-1928.

Illegal Practitioner Arrested.—Herbert C. Penny, Boston, was recently arrested for holding himself out as a practitioner of medicine without being registered, and for advertising a place for the treatment of venereal disease. He pleaded guilty, April 5, to both charges, and was placed on probation.

Doctor Graves Elected to Baker Chair of Gynecology.—Dr. William Phillips Graves, Boston, has been elected the first incumbent of the Baker chair of gynecology at the Medical School of Harvard University. The chair was endowed by Dr. William Henry Baker of Boston, who died in 1914. Dr. Graves is a graduate of Harvard Medical School, and has been professor of gynecology since 1911.

Doctor Walcott Resigns at Harvard.—Dr. Henry Pickering Walcott, for about thirty-seven years a member of the Harvard Corporation, has resigned at the age of 89. Among other honors which have come to Dr. Walcott is the presidency of the Massachusetts Medical Society, of the American Public Health Association, and of the American Academy of Arts and Sciences. He was formerly acting president of Harvard College, chairman of the trustees of the Massachusetts General Hospital, and a trustee of the Carnegie Institution of Washington.

Society News.—Dr. Emmet Rixford, professor of surgery, Stanford University School of Medicine, San Francisco, addressed the Harvard Medical School, May 3, on "Mechanics of the Production of Fractures."——Dr. Charles G. Miles has been elected president of the Brockton Medical Society.——Dr. Fred B. Lund was elected president of the Boston Medical History Club at the annual meeting, April 29; Dr. Joseph W. Courtney read a paper by C. J. S. Thompson, M.B.E., on "Surgical Instruments Designed by Lord Lister," illustrated with lantern slides.

MICHIGAN

Personal.—Dr. Edward G. Folsom, Mount Clemens, recently completed his fiftieth year in the practice of medicine; Dr. Folsom has been health officer of Mount Clemens for thirty-five years.——Dr. Aldred S. Warthin, professor of pathology, University of Michigan Medical School, Ann Arbor, was reelected vice president and editor of the *Annals of Clinical Medicine* at the February meeting of the American College of Physicians, and at the April meeting of the American Federation of Experimental Biology in Rochester, N. Y., he was elected president of the American Association for Cancer Research.

Society News.—About seventeen members of the Detroit Surgical Society visited the Mayo Clinic, Rochester, Minn., April 25-26.——Dr. Frank B. Tibbals, Detroit, addressed a joint meeting of the Lenawee County Bar Association and the county medical society recently on "Cause and Prevention of Malpractice Suits"; Dr. John B. Jackson, Kalamazoo, president, state medical society, spoke on "Benefits of Organization."——At a recent meeting of the St. Clair County Medical Society, Dr. Hugo A. Freund, Detroit, spoke on "Cardiography"; Dr. Alexander M. Campbell, Grand Rapids, addressed the April 7 meeting on "Prenatal and Postnatal Care."——Dr. Esli T. Morden, Adrian, addressed the March 24 meeting of the Lenawee County Medical Society, Hudson, on "The Business Man's Cold."——Dr. George Van Amber Brown, Detroit, addressed the Highland Park Physicians' Club, May 5, on "Developmentally Unfit Infants," illustrated.——Luce County Medical Society has become a new unit in the state society, having been organized April 11; Dr. Henry E. Perry, Newberry, was elected president.——Under the auspices of the state medical society, a postgraduate conference was held at Bay City in the Tenth Councilor District, March 31. Seventy-five physicians were present. A postgraduate conference was conducted in Cadillac, April 19, and another at Lansing, April 26.

MINNESOTA

Society News.—Dr. Emil S. Geist addressed the Minnesota Academy of Medicine, Minneapolis, April 13, on "Fracture of the Hip," and Dr. George E. Fahr on "Myxedema Heart." Dr. Charles F. Nootnagel, Jr., addressed the academy, May 11, on "Extragastric Closure of the Pylorus."

Personal.—Dr. Douglas H. Mebane, medical corps, U. S. Army, recently left Rochester after spending three months at the Mayo Foundation.——Dr. Horatio B. Sweetser has been elected president of the Minneapolis Surgical Society, and Dr. Theodore H. Sweetser, secretary-treasurer.——Dr. Wilfred J. Hewson has been appointed assistant superintendent of the St. Peter State Hospital, St. Peter.

NEBRASKA

State Medical Meeting.—At the annual meeting of the Nebraska State Medical Association, Lincoln, May 10-12, there was a symposium on the gallbladder by Drs. Elexious T. Bell of the University of Minnesota Medical School; John M. Mayhew, Lincoln; Roy W. Fouts, Omaha; Claude P. Fordyce, Falls City, and George B. Dent, North Platte. The surgical address was delivered by Dr. Donald B. Steenburg, Aurora, and the address on medicine by Dr. Harry J. Wertman, Milford. There was a symposium on diseases of the chest by Drs. Earle E. Farnsworth, Grand Island; George W. Covey, Lincoln; William N. Anderson, Omaha; Harry C. Berger, Kansas City, and Casper F. Hegner, Denver.

NEW JERSEY

Hospital Drives Over the Top.—The campaign for $2,000,000 for the Orange Memorial Hospital, Orange, which was oversubscribed by several thousand dollars, May 19, is said to be the largest sum raised by public subscription in a suburban community for a hospital. The campaign for $850,000 for a new Presbyterian Hospital at Newark, which closed, May 20, was also oversubscribed, the total amount being almost $923,000. The new building to be erected at Ninth Avenue and South Ninth Street will more than treble the capacity of the old building.

County Society News.—Dr. Alexander Marcy, Jr., addressed the Burlington County Medical Society, April 13, at the Union League Club, Philadelphia, on the life of the late Dr. Enoch Hollingshead, a former president of both the county and New Jersey State medical societies; the members were the guests of Dr. Irving W. Hollingshead at the dinner in memory of his father; Dr. John B. Carnett also spoke on "Pseudo-Appendicitis" and Dr. James T. Rugh, Philadelphia, on "Surgical Tuberculosis."——Dr. Howard C. Curtis, Morristown, addressed the Camden County Medical Society, April 12, on "Relationship of Types of Human Constitution to Disease."——Dr. Robert A. Kilduffe, Atlantic City, addressed the Cape May Medical Society, Ocean City, April 5, on "Laboratory Work as Applied to the General Practitioner"; Dr. Randolph Marshall, Tuckahoe, who has completed fifty years in the practice of medicine, was the guest of the society.——Dr. Sherman F. Gilpin, Philadelphia, addressed the Cumberland County Medical Society, April 5, on mental and nervous diseases.——Dr. Charles A. Gordon, Brooklyn, addressed the Essex County Medical Society, April 14, on "Taking Graduate Education to the Practitioner."——Dr. J. Parsons Schaeffer, Jefferson Medical College, Philadelphia, addressed the Gloucester County Medical Society, April 21, on "The Individual Anatomy of Man as Applied to Practical Medicine and Surgery."——Dr. Reginald Burbank, New York, addressed the Hudson County Medical Society, April 5, on "Serologic Diagnosis and Complement Determination in the Arthritides."—Dr. Grenelle B. Tompkins, Flemington, addressed the Hunterdon County Medical Society, April 19, on "Roentgen-Ray Diagnosis of Constipation."——Dr. Thomas Grier Miller of the University of Pennsylvania School of Medicine, Philadelphia, addressed the Mercer County Medical Society, April 13, on "Ephedrine with Reference to Its Clinical Value."——Dr. Howard C. Taylor, New York, addressed the Morris County Medical Society, April 26, on "Cancer Control."——Dr. Thomas B. Lee, Camden, addressed the Salem County Medical Society, April 13, on "Diagnosis of Gynecologic Cases."——The Summit County Medical Society gave a dinner, recently, in honor of Dr. Wellington Campbell, Millburn, to celebrate his completion of fifty years in the practice of medicine.——Dr. Robert Abrahams, New York, addressed the Bayonne Medical Society, April 18, on "Clinical Miscellany."

NEW YORK

State Medical Election.—At the annual meeting of the Medical Society of the State of New York, Niagara Falls, May 10, Dr. James E. Sadlier, Poughkeepsie, was installed as president; Dr. Harry R. Trick, Buffalo, was made president-elect; Drs. Joshua M. Van Cott, Brooklyn, and Horace M. Hicks, Amsterdam, vice presidents; Dr. Charles G. Heyd, New York, treasurer, and Dr. Daniel S. Dougherty, New York, secretary, reelected.

Resignations at State Hospitals.—The April Psychiatric *Quarterly* notes the following resignations of assistant physicians in the various state hospitals since about January 1:

Dr. Geoffrey C. H. Burns, Manhattan State Hospital.
Dr. Samuel Cohen, Kings Park State Hospital.
Dr. Louis J. Doshay, Manhattan State Hospital.
Dr. Blanché Elliott, Manhattan State Hospital.
Dr. Paul Levi, Gowanda State Homeopathic Hospital.
Dr. Frank B. Lucas, Utica State Hospital.
Dr. Leo J. Palmer, Institution for Defective Delinquents.
Dr. Eugene Pick, Central Islip State Hospital.
Dr. Curtis Prout, Manhattan State Hospital.
Dr. Anthony F. Sava, Brooklyn State Hospital.
Dr. Herman G. Selinsky, Kings Park State Hospital.
Dr. Claude E. Tubb, Hudson River State Hospital.
Dr. David P. Young, Middletown State Homeopathic Hospital.

New York City

Chiropractor Fined.—William Overton, a chiropractor at 508 West One Hundred and Twelfth Street, was fined $250, May 9, for practicing medicine without a license, it is reported.

Liquor Licenses Revoked.—The federal district prohibition administrator with headquarters in New York City recently revoked the liquor licenses of the following on account of irregular prescriptions:

Dr. Ward Bryant Hoag.
Dr. Ralph Knowles.
Dr. William Charles Willis, Little Neck, L. I.

Physicians' Golf Tournament.—The first tournament of the New York City Physicians' Golfing Association will be held at the Rye Country Club, Rye, June 10. Eighteen holes will be played, and prizes have been donated for the winners. The committee on membership comprises Drs. Dudley D. Roberts, John G. W. Greeff, Edward P. Eglee, Harold M. Hays and Anthony Bassler.

Meeting of Otologists.—The American Otological Society held a public meeting at the New York Academy of Medicine, May 20, for a discussion of problems of progressive deafness by the president of the Carnegie Foundation, the chancellor of New York University and Dr. Edward B. Dench. There was an exhibition of the latest hearing aids, and a lantern slide exhibition of the "Osiso," an invention which is said to convert sound waves into visible images that can be easily read by persons who have been instructed in its use.

Dinner Opens Campaign for Funds.—A dinner at the Hotel Biltmore, April 29, marked the opening of a campaign for $5,000,000 for the New York Cancer Association to establish a cancer hospital at West End Avenue and Seventy-Second Street. The president of the New York Cancer Association, Sanders A. Wertheim, contributed $50,000; four other gifts of $5,000 were received. Among the speakers were Drs. George D. Stewart, president, American College of Surgeons; Bird S. Coler, commissioner of public welfare, and Isaac Levin, director of the Municipal Cancer Institute.

Employment Bureau for the Disabled.—Following a study of the problem of finding work for handicapped men, women and children made by the Russell Sage Foundation and the Jewish Social Service Association of America, four of the largest agencies in New York have combined as far as this service is concerned. They are the Institution for Crippled and Disabled Men, the New York Tuberculosis and Health Association, the Jewish Social Service Association and the Employment Bureau for the Handicapped. The new service will be called the Joint Employment Bureau for the Disabled, and its headquarters will be at the Institute for Crippled and Disabled Men, 245 East Twenty-Third Street.

Appointments and Promotions at Columbia University.—The president of Columbia University announced, April 27, the following changes, among others, in the faculty: Dr. Alfred Owre, now dean of the College of Dentistry, University of Minnesota, to be dean of the school of dental and oral surgery and professor of dentistry at Columbia; Samuel R. Detwiler, Ph.D., of Harvard University, Boston, and Philip E. Smith, Ph.D., of Stanford University, Calif., to be professors of anatomy; Dr. George H. Ryder, to be clinical professor of obstetrics. The following were promoted to professorial grade: Dr. William E. Caldwell, clinical obstetrics and gynecology; Dr. Mortimer W. Raynor, from assistant professor to clinical professor of psychiatry; Dr. James A. Corscaden, promoted to assistant professor of clinical gynecology; Dr. Harbeck Halsted to assistant professor in clinical obstetrics and gynecology, and Dr. Royal C. Van Etten to assistant professor in clinical obstetrics and gynecology.

OHIO

Dr. Bogen Wins California Prize.—Dr. Emil Bogen, receiving physician at the Cincinnati General Hospital, Cincinnati, has been awarded the prize offered by the California Medical Association, it is reported, for the best essay on clinical research submitted during the year. Dr. Bogen's essay was on the subject of "Diagnosis of Drunkenness"; this is said to be the second consecutive year that he has won the prize of the California Medical Association, his essay last year having been on "Poisonous Spiders."

State Medical Election.—At the recent annual meeting of the Ohio State Medical Association, Columbus, Dr. Leslie L. Bigelow of that city was installed as president; Dr. Charles W. Stone, Cleveland, was made president-elect; Dr. Herbert M. Platter, Columbus, treasurer, and Mr. Don K. Martin, Columbus, executive secretary; Dr. Clyde L. Cummer, Cleveland, was elected councilor for the fifth district for the unexpired term of Dr. Stone, who was elected president-elect, and Dr. Philip H. Cosner, Newark, was elected councilor for the eighth district.

Banquet Without an Orator.—The College of Medicine of the University of Cincinnati announces that at its annual meeting the Alumni Association will give a banquet at the Queen City Club, Cincinnati, June 17, in honor of the emeritus professors of the college. They say, "No orator will grace the occasion." There will be four five minute talks, professional entertainers, special medical moving pictures and dancing. For the free postgraduate week, June 13-18, offered by the college at the request of the Alumni Association, more than a hundred have matriculated.

Toledo Organizes Speakers Bureau.—The Academy of Medicine of Toledo and Lucas County has formed a speakers' bureau to supply qualified speakers on medical subjects before civic organizations and clubs. Any member of the academy capable of assisting in this work may be enrolled in the bureau, which is established to meet the growing demand for information on medical subjects. It is organized under the education committee of the academy, of which Dr. Louis R. Effler is chairman, and will be headed by Dr. Earl W. Huffer. Any organization desiring a medical lecture may communicate with the academy, indicating the subject desired.

Personal.—Dr. Clarence D. Barrett, Mansfield, has resigned as health commissioner of Mansfield and Richland County, effective, May 31, to accept a similar position in Lorain County.——Dr. Benjamin A. S. Stephenson, Logan, has been appointed health officer of Shelby County to succeed Dr. Melville D. Ailes, who became health officer of the city of Akron. ——Dr. James G. Blower, Akron, is now president of the state medical board, and Dr. Lester E. Siemon, Cleveland, was recently appointed a member of the board.——Dr. Roy G. Hoskins, professor of physiology, Ohio State University College of Medicine, Columbus, has been granted a leave of absence to be research associate at the Medical School of Harvard University until September 1.

PENNSYLVANIA

Health Officer for Pittsburgh.—Dr. Richard G. Burns has been appointed health officer of the city of Pittsburgh, it is reported, to succeed the late Dr. Carey J. Vaux. Dr. Burns has been in the local health service for about thirty-two years, and for some time has been head of the bureau of infectious diseases.

Society News.—Dr. Oliver H. P. Pepper, Philadelphia, addressed the Westmoreland County Medical Society, April 5, on "Blood Count in Diagnosis and Treatment."——At the annual spring meeting of the Bucks County Medical Society, Dr. Edward J. Klopp of Jefferson Medical College spoke on "Gastric and Duodenal Ulcers." Drs. William T. Sharpless, West Chester, a trustee of the state medical society, Theodore B. Appel, Wilmer Krusen and Charles W. Many, county medical director, gave addresses.

Supreme Court Upholds Tuberculosis Hospital Act.—The state supreme court has upheld the act of March 23, 1925, which provided for the establishment of tuberculosis hospitals by the counties of the state. Justice Schaffer wrote the opinion which held the act constitutional. Appeals from Northampton, Montgomery and Schuylkill counties have questioned the constitutionality of the act. The supreme court decided that when the people of a county had authorized the building of tuberculosis hospitals, the question of building rests with the county commissioners. The act is not mandatory but permissive, and it is for the commissioners to decide whether the tuberculosis hospital should be built.

Philadelphia

Fund for Physical Education.—The board of trustees of the University of Pennsylvania recently received a bequest of about $61,000 under a clause in the will of the late J. William White, providing that the remaining one third of the principal shall be held by the university to be known as "The J. William White Fund for Physical Education and Athletics."

Jefferson Plans New Medical College.—A drive is to be conducted, June 6-14, for $1,500,000 for the erection of a new building for Jefferson Medical College on the north side of Walnut Street between the present college and Clifton Street. The first six floors will be for college purposes, and the use to which the others will be placed has not yet been determined. The present building at Tenth and Walnut streets will be transformed into an outpatient department. At a luncheon, May 16, at the Benjamin Franklin Hotel, the president of the board of trustees, Mr. Alba B. Johnson, outlined the needs of the school and how the funds are to be expended.

RHODE ISLAND

License Revoked.—The state board of health reports that the license of Dr. John B. Coffey, Providence, was revoked, April 14. Dr. Coffey, it is said, pleaded guilty, March 26, to the charge of driving an automobile while under the influence of liquor.

Society News.—Dr. Arthur H. Ruggles, Providence, addressed the Rhode Island Medical Society, March 3, on "Mental Health and Education."——Dr. Robert T. Henry, Pawtucket, has been elected president of the Pawtucket Medical Association for the ensuing year to succeed Dr. Stephen A. Kenney, Valley Falls; at this meeting Judge Fitzsimmons, Lincoln, spoke on "General Welfare"; among the other guests were Drs. Herbert G. Partridge, Providence, president, Rhode Island Medical Society; Frederic V. Hussey and Arthur T. Jones, both of Providence, and Julian A. Chase and Charles H. Holt, both of Pawtucket.

SOUTH DAKOTA

New Superintendent of State Board.—Dr. Park B. Jenkins, Waubay, has been appointed superintendent and executive officer of the South Dakota State Board of Health to succeed Dr. John F. D. Cook. There have been no other changes in the personnel of the board.

Personal.—Dr. Clara E. Hayes, Waubay, director, division of child hygiene of the South Dakota State Board of Health, has resigned her position with the South Dakota State Board of Health to accept a position with the American Child Health Association, New York.

VIRGINIA

Dr. Flippin Appointed Dean.—At the April meeting of the board of visitors of the University of Virginia, Dr. James C. Flippin was appointed dean of the department of medicine of the university; Dr. Flippin has for some time been the acting dean.

Change in Professorships.—Dr. Isaac A. Bigger, Jr., assistant professor of surgery and gynecology, University of Virginia Department of Medicine, accepted the associate professorship of surgery in Vanderbilt University Medical Department, Nashville, Tenn., and took up his duties, May 1; Dr. Stephen H. Watts has resigned as professor of surgery and gynecology at the University of Virginia Department of Medicine, effective, September 1.

Society News.—The three counties, Nottoway, Dinwiddie and Prince George, have organized a tri-county medical society; it is planned to return the individual charters of the county society and to request a new charter to include the three counties. Dr. Edgar W. Young, Petersburg, was elected president, and Dr. William C. Powell, Petersburg, secretary.——Drs. Charles H. Davidson and Reid White, Lexington, addressed the Rockbridge County Medical Society, April 1, on "Tularemia," in which the first cases to be diagnosed on the Atlantic Coast were reported.——Dr. Howard Urbach was elected president of the Richmond Pediatric Society, March 31.

Supreme Court Upholds Sterilization Law.—The Supreme Court of the United States handed down an opinion, May 2, upholding a Virginia state law, approved in 1924, to the effect that certain feebleminded persons may be sterilized by the state for the purpose of relieving the commonwealth of the burden of supporting children of mental defectives. The case in question, it is said, pertained to a feebleminded woman who had been committed to the state colony for the epileptic and feebleminded, who was the daughter of a feebleminded mother and the mother of a feebleminded child. The supreme court said in part, it is reported, that "it is better for all the world, if instead of waiting to execute the degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit for continuing their kind. The principle that sustains compulsory vaccination is broad enough to cover cutting the fallopian tubes. Three generations of imbeciles are enough."

WEST VIRGINIA

Evolution Bill Denied Hearing.—The lower house of the West Virginia legislature rejected by viva voce vote, April 13, an evolution bill which had been introduced forbidding the teaching of "any nefarious matter."

Society News.—The Harrison County Medical Society, April 7, endorsed the bill which is before the legislature to provide funds for extending the medical course at the uni-

versity for four years.——The Fayette County Medical Society held a symposium on pediatrics, Mount Hope, April 12, the speakers being Drs. Arthur A. Shawkey, Charleston; Kyle M. Jarrell, Beckley, and Martin V. Godbey, McKendree. Among the guests were Dr. Morrison, New York, who spoke on "Immunization of Children Against Acute Infections" and Dr. John Thames, Charleston, who spoke on the "Relation of the Health Officer to the Practicing Physician."——The family of Dr. Alfred N. Frame has presented his entire medical library to the Parkersburg Academy of Medicine. ——Dr. William S. Magill addressed the Barbour-Randolph-Tucker County Medical Society, Elkins, April 20, on "Prophylaxis and Treatment of Typhoid."——Dr. Hunter H. McGuire, Richmond, addressed the Eastern Panhandle Medical Society, Martinsburg, recently, on "Incipient Cataract."

WISCONSIN

Personal.—Dr. Edward J. Campbell has been appointed city health commissioner of Oshkosh, at a salary of $3,500, to succeed the late Dr. Arthur H. Broche; the office of city health commissioner and that of city physician were consolidated at this meeting of the council.——Dr. Philip Fox, Madison, recently celebrated his eighty-seventh birthday; Dr. Fox was in active practice until about six years ago.——Dr. William W. Bauer has tendered his resignation as health officer of Racine to accept a position on the staff of the Wisconsin Anti-Tuberculosis Association——Dr. Clark O. Decker has been elected mayor of Crandon.——Dr. Ernst A. Pohle, of the University of Michigan, has been appointed professor of physiologic chemistry of the University of Wisconsin, and Edward Witzemann, instructor in physiologic chemistry, Mayo Clinic, Rochester, Minn., has been appointed to direct "therapeutic work with radium and x-ray."

Society News.—Dr. George Elmer Strout, Minneapolis, addressed the Eau Claire and Associated Counties Medical Society, recently, on "Conservation of Vision."——Dr. Otho A. Fiedler, Sheboygan, addressed the Manitowoc County Medical Society, April 14, on "Hypertensive Heart Disease." ——Dr. Arthur W. Rogers, Oconomowoc, president of the state medical society, addressed the Kenosha County Medical Society, April 19, on "How to Keep Well."——Dr. Henry B. Thomas, Chicago, held an orthopedic clinic before the Outagamie County Medical Society, April 19, in conjunction with the work of the Wisconsin State Rehabilitation Commission.——Dr. Peter Bassoe, Chicago, addressed the Milwaukee Academy of Medicine, April 26, on "Neurologic Aspects of Brain Tumors," and Dr. Walter E. Dandy, Johns Hopkins Hospital, Baltimore, on "Surgery of Brain Tumors."

CANADA

Hospital News.—The new Nickle maternity pavilion at the Kingston General Hospital has been opened for the reception of patients.——The board of governors of the Toronto General Hospital announces plans to increase the bed capacity of the hospital by nearly 200. A nurses' home, a pavilion for private patients, and a pathology building are included in the plans of enlargement.——McGill University will open an industrial clinic at the Montreal General Hospital this spring.

Personal.—Dr. M. Arthur Rousseau, dean and professor of clinical medicine, of the medical faculty of Laval, N. B., University Faculty of Medicine, was recently appointed a corresponding member of the Academie de Medecine in Paris; he is the first Canadian physician to receive this honor; on his return from Paris, Dr. Rousseau was guest of honor at a dinner.——Col. R. St. J. Macdonald, associate professor of preventive medicine, McGill University Faculty of Medicine, has been made a fellow of the Royal Sanitary Institute, England. Dr. Macdonald is the author of a book entitled "Field Sanitation," which is considered official for the Canadian Army Medical Corps.——Dr. Wilbur H. Harris, chief surgeon, Grace Hospital, Toronto, was recently presented with a portrait of himself at a banquet given in his honor.——Dr. Malcolm R. Bow, superintendent, Regina General Hospital, Regina, Sask., has been appointed deputy minister of public health in the Province of Alberta.——Dr. John A. Gunn has resigned as chief surgeon at the St. Boniface (Man.) Hospital, and been succeeded by Dr. Gordon S. Fahrni.——Dr. L. Boez, formerly assistant to Professor Calmette and assistant director, Pasteur Institute, Paris, recently came to the University of Montreal to lecture for ten weeks at the new Institut Scientifique Franco-Canadienne. Dr. Boez is professor of bacteriology at the University of Strasbourg, and last year worked with the American Commission which went abroad to study foot and mouth disease.

GENERAL

New Prohibition Commissioner.—J. M. Doran, for many years a government chemist, has been appointed prohibition commissioner to succeed Roy A. Haynes, and Seymour Lowman, formerly lieutenant governor of the state of New York, has been appointed to succeed Lincoln C. Andrews as an assistant secretary of the treasury in charge of enforcement.

Extended Study of Cost of Medical Care.—At a conference in Washington, May 17, of about sixty physicians, sanitarians and economists, a committee was organized which plans to conduct an adequately financed study of the cost of medical care over a period of five years. Dr. Ray Lyman Wilbur, president of Stanford University and past president of the American Medical Association, presided at the first session, and Dr. Lewellys F. Barker, Baltimore, at the second session of the committee. The temporary address of the committee is 1724 I Street, N.W., Washington, D. C.

Society News.—Dr. Aldred S. Warthin, Ann Arbor, was elected president of the Association of American Physicians at the recent annual meeting; Dr. Campbell P. Howard, Montreal, vice president, and Dr. James H. Means, Massachusetts General Hospital, Boston, secretary. The next meeting will be in Washington, D. C., May 1-3, 1928.——Dr. Gordon S. Fahrni, Winnipeg, Canada, was elected president of the American Society for the Study of Goiter at the Philadelphia meeting; the society will hold its next meeting in Denver.——Dr. Henry G. Bugbee, New York, was elected president of the American Association of Genito-Urinary Surgeons at the annual meeting, Absecon, N. J., May 9-11.

New Medical Directory Lists 164,002 Names.—The tenth edition of the American Medical Directory, which has just been completed, contains the names of 164,002 graduates in medicine in the United States, Canada, Philippine Islands, Hawaii, Alaska, Porto Rico and the Canal Zone. This is an increase of 2,644 names over the last edition. There is no other medical directory so complete as the directory published by the American Medical Association. It contains data not only on individual physicians, but also on hospitals, approved laboratories, medical colleges, licensing boards and the laws governing medical practice. There is information about boards of health, medical societies, health officers and the government medical services. The association sells the directory for $15, which is less than cost.

Disease Prevention Among Flood Refugees.—Physicians and other medical personnel engaged in work among refugees from the Mississippi flood had, May 5, administered vaccine against typhoid and smallpox and given malaria preventive treatment to 300,000 persons. Physicians and nurses were sent to the flooded areas by many state health departments, the U. S. Army, the U. S. Public Health Service and other organizations to assist in this work. The *Red Cross Courier* notes there were 323,837 persons in the seven flooded states being cared for by the Red Cross, and that the total was rapidly increasing as levees broke in new places. All manner of boats and seaplanes were at work assembling people scattered over hundreds of square miles of submerged lands. The Red Cross then had sixty-six concentration camps. There were 826 power boats plying the flood waters, and thirty radio stations were maintaining communication with the headquarters in Memphis. No serious outbreak of disease had occurred up to May 4 in any of the Red Cross camps, although typhoid had "threatened" in Arkansas.

Bequests and Donations.—The following bequests and donations have been announced recently:

Woman's Hospital, New York, $300,000 and a contingent bequest of $1,275,000, by the will of the late Mrs. Mary Clark.

Northeastern Hospital, Philadelphia, $5,000 from Mrs. Georgella Simonin and Eugene Simonin in memory of Isaac M. Simonin, former vice president of the hospital; $10,000 from Mrs. I. H. West and William L. Holmes to endow a room in memory of their mother, and $15,000 from Mr. and Mrs. Paul E. Sutro, president of the hospital, and his wife, for the erection of a new children's ward.

Tacoma General Hospital, Tacoma, an endowment of $10,000 from Hugh C. Wallace, formerly ambassador to France, in memory of his son.

Mount Sinai Hospital, New York, $177,336, and Montefiore Hospital, New York, $50,000, by the will of the late Henry Franklin Elias.

Johns Hopkins Hospital, about $250,000, by the will of Mrs. Mary H. Conklin, Baltimore, on the deaths of her sister and niece, for a memorial to her husband to be known as the Daniel E. Conklin Memorial Fund.

St. Luke's, Mount Sinai, Lenox Hill and Montefiore hospitals, all of New York, each $5,000, by the will of Aaron Bachrach.

Good Samaritan Hospital, Sandusky, Ohio, $20,000, by the will of Mrs. Mary Dauch.

Presbyterian Hospital, Chicago, $10,000 from the estate of the late Arthur B. Jones, a trustee of the Marshall Field estate.

Beth David Hospital, $15,000; Montefiore Home for Incurables, $5,000, both of New York, by the will of the late Solomon Shapiro.

Mount Sinai Hospital and the Hospital for Joint Diseases, both of New York, each $1,000, by the will of Samuel H. Levy.

Misericordia Hospital, New York, $5,472, by the will of the late Mary F. Fitzgerald.

Hospital of Tulane University of Lousiana, New Orleans, $10,000 to establish a memorial bed, by the will of the late Mrs. Mary McCay Schaffter.

Children's Hospital, Birmingham, Ala., $5,000, by the will of Lewis B. Woodruff, New York, in memory of his wife, and $25,000 to the New York Association for the Blind.

Newport Hospital, Newport, R. I., a trust fund of $50,000, by the will of the late Dr. Charles A. Brackett, professor emeritus of oral pathology at Harvard University.

St. Luke's Hospital, New York, $7,500; the New York Association for the Blind and St. Mary's Protestant Episcopal Hospital, each $2,000, and the Harlem Eye and Ear Hospital, $1,500, by the will of Annie McCarty.

St. Luke's Hospital, New York, will receive about $1,470,000 and half the proceeds of the sale of some city real estate through the death of Mrs. Mary A. Scrymser, which constitutes half a trust fund left by her husband.

Columbia University for the John E. Borne Chair of Medical and Surgical Research, $325,000; the Long Island College Hospital, $15,000 to endow two beds, and the Presbyterian Hospital, $10,000, through the appraisal of the estate of the late Mrs. Ellen Mills Borne.

Frankford Hospital, Philadelphia, $6,000, by the will of the late Joseph L. Wilson, to establish and maintain a free bed in memory of Joseph L. Wilson and Mary, his wife.

Visiting Nurse Society, Philadelphia, about $46,000 "to endow a nurse in perpetuity," by the will of the late Anna Elizabeth Vander Veer Rohrman, and $50,000 to the Philadelphia Home for Incurables; $15,000 for the Orphans Society of Philadelphia and $10,000 for the Home for Aged Couples.

Lutheran Hospital, New York, $5,000, by the will of Trina Prigge.

Nassau Hospital, Mineola, L. I., a trust fund of $50,000 under the will of the late Roswell Eldridge.

New York Dispensary, New York, $10,000; St. Luke's Hospital, $5,000 by the will of the late John A. McKim.

Episcopal Hospital, Pennsylvania Hospital and Presbyterian Hospital, all of Philadelphia, each $25,000; St. Agnes' Hospital, $10,000; Jewish Hospital Association, $25,000; Rush Hospital for Consumptives and Allied Diseases, $25,000; White Haven Sanatorium for Consumptives, $20,000, by the will of the late William H. Harrison of Cheltenham.

Mount Sinai Hospital, Maternity Hospital, both of Philadelphia, and Eagleville Sanatorium, Eagleville, Pa., each $5,000, by the will of Helen K. Fridenberg.

Presbyterian Hospital, Philadelphia, $1,600, by the will of Walter Monaghan.

Wills Eye Hospital, $1,000, and the Woman's Hospital of Philadelphia for the heart clinic, the residue of an estate of $5,000, by the will of the late Mary Cunningham.

University of Pennsylvania Hospital, Philadelphia Home for Incurables and the Home of the Merciful Savior for Crippled Children, all of Philadelphia, each $5,000, by the will of Adelaide V. Brunner.

St. Christopher's Hospital, Philadelphia, about $17,000, by the will of Theodore F. Miller.

Home for Consumptives, Philadelphia, $10,000, by the will of Elizabeth C. Lucas.

Mount Sinai Hospital, New York, $5,000, and Montefiore Hospital, $2,000, by the will of Isaac J. Bernheim.

Norwalk City Hospital Association, Norwalk, Ohio, $1,000, by the will of the late Fannie Reed Gilman.

LATIN AMERICA

Medical Congress Postponed.—The Seventh Latin American Medical Congress which was to have been held in Mexico City, May 15, has been postponed to July 15 in order that the new building of the bureau of public health, where the sessions will be held, may be finished.

Gift for Medical Building.—The Rockefeller Foundation will give $650,000 toward the construction of a new $1,500,000 building for the faculty of medicine at São Paulo. As a condition of the donation, the state government has agreed to construct hospitals in connection with the new medical school. The department of the interior of the state at São Paulo has received also from the Rockefeller Foundation $50,000 as the the first instalment of a gift with which to construct an institute of hygiene.

First Session of School of Tropical Medicine.—During the first session of the School of Tropical Medicine of the University of Porto Rico and Columbia University, public lectures have been given by several visiting scientists, the last one in the series May 3, being by Dr. James W. Jobling, professor of pathology, Columbia University College of Physicians and Surgeons, New York, on "Blood Destruction and Regeneration with Special Reference to the Influence of Diet"; Dr. Simon Flexner, director, Rockefeller Institute for Medical Research, New York, gave a lecture in this series, March 8, on "Experimental Epidemiology"; Dr. Martha M. Eliot, New Haven, Conn., of the U. S. Children's Bureau, March 2, "Investigations on Rickets in New Haven"; Dr. A. Watson Sellards, assistant professor of tropical medicine, Harvard University Medical School, Boston, February 22-25, "Bonds of Union Between Tropical Medicine and General Medicine" and "Relation Between Weil's Disease and Yellow Fever"; February 4 and 9, Dr. Juan Iturbe, Caracas, "Schistosomiasis, Trypanosomiasis and Pulmonary Distomatosis in Venezuela," and Prof. Earle B. Phelps, DeLamar Institute of Public Health, Columbia University College of Physicians and Surgeons, New York, January 11, on "The Environment."

Deaths in Other Countries

Jules Boekel, professor of surgery, Strasbourg University, aged 78. —— **René Schickelé,** professor of gynecology and obstetrics, Strasbourg University, aged 52. —— **J. de Bruin,** professor of pediatrics, University of Amsterdam, aged 65. —— **Sir Kailas Chandra Bose,** formerly president of the Calcutta Medical Society, vice president of the first Indian Medical Congress, and a commissioner of the city of Calcutta; the first Indian physician to be knighted, a philanthropist, and a member of the governing body of the state medical faculty of Bengal, January 19, of heart disease, aged 76.——**Karl Ipsen,** professor of forensic medicine, University of Innsbruck, aged 72.——**Karl Stargardt,** professor of ophthalmology, University of Marburg, aged 51.——**Fritz Goppert,** professor of pediatrics, University of Gottingen, February 9, aged 57.——Prof. **Giuseppe Marcarini,** aged 52. ——Prof. **Hans Strasser,** teacher of anatomy at the University of Bern since 1887, aged 75.

Government Services

Navy Personals

Lieut. Comdr. Fred L. McDaniel, medical corps, has received the diploma in psychologic medicine conferred by the Royal College of Physicians and Surgeons of England, following an examination by the Conjoint Board in London. ——Rear Admiral Edward R. Stitt, Surgeon General, U. S. Navy, received a key of membership from the Phi Beta Kappa Association of Philadelphia, April 19, and from the Alpha Chapter of South Carolina of the Phi Beta Kappa Honorary Fraternity.

Contest—Cash Prize for Best Paper

The Association of Military Surgeons of the United States announces the Henry S. Wellcome Medal and Prize of $500 for the best paper on "In Consideration of the Physical Disabilities Found in Drafted Men and Volunteers of the World War, What Practical Hygienic Measures are Advisable for School Children in the United States?" The contest is open to all medical officers, former medical officers, acting assistant and contract surgeons of the army, navy, health service, national guard, volunteers and reserves, and commissioned medical officers of foreign military services. Competitors should send five copies of their papers to the secretary of the association, Army Medical Museum, Washington, D. C., to arrive not later than September 1, accompanied by a sealed envelop marked on the outside with the fictitious name assumed by the writer and enclosing his true name, title and address. Essays must be between 3,000 and 10,000 words. Should the executive council designate another paper for "first-honorable mention," the writer will be awarded life membership in the Association of Military Surgeons.

Successful Candidates for the Navy

Among about 300 senior medical students in class A schools, seventy-four passed the competitive examination held in January for appointment to internships in the medical corps of the navy, and will be commissioned lieutenants (junior grade) on graduation from the medical schools in June. The next examination of the senior medical students for internships will be January, 1928. Information concerning this service may be obtained from the surgeon general, U. S. Navy, Washington, D. C.

Examination for Entrance to Public Health Service

Surg. Gen. Hugh S. Cumming announces that examinations will be held, August 8, for entrance into the regular corps of the U. S. Public Health Service, at San Francisco, New Orleans, Chicago, and Washington, D. C. Request for permission to take the examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C. Candidates must be not less than 23 nor more than 32 years of age, and graduates of reputable medical colleges; they must, also, have had one year's hospital experience or two years in practice. They must pass all oral, written and clinical tests before a board of medical officers and undergo a physical examination. Successful candidates will be recommended for appointment by the President.

Foreign Letters

LONDON

(From Our Regular Correspondent)

May 14, 1927.

The Falling Birth Rate

W. R. Inge, dean of St. Paul's, who is remarkable for his outspoken criticism of political and social conditions, has written on the falling birth rate. Last year, he says, the birth rate of England and Wales was 17.8 per thousand; in 1925 it was 18.3. The maximum was reached in 1877, when the figure was 36. In the years 1886-1890 it had fallen to 31.4; in 1901-1905 it was 28.2; in 1906-1910, 26.3; in 1911-1915, 23.6. In 1920 the return of the demobilized soldiers caused a rise to 25.5; since then the figures have been 22.4, 20.4, 19.7, 18.8, 18.3 and 17.8. The fall, which from 1877 onward had averaged one point every three years, has lately been accelerated. The decline in the death rate has been roughly parallel to the decline in the birth rate, but it is hardly possible that any great further reduction is to be expected. In 1866-1870 the death rate per thousand was 22.4; last year it was under 12. Thus both rates have been halved in fifty or sixty years. The crude death rate, however, is of little use in calculating the real healthiness of the country, because while numbers are growing there is a preponderance of young lives, with an extremely low death rate. Actuarial tables show that in the years 1910-1912 the expectation of life at birth in this country was 51.50 years for males and 55.35 for females. At present the average duration of life for both sexes together is 56 or 57 years. If 56 is divided into 1,000 the quotient is 17¾, which exactly corresponds with the birth rate last year. It follows that on the basis of a stationary population an equilibrium has now been reached.

So much for the facts and figures. Where four children were born half a century ago, only two are born today. The decline would be even greater if we excepted the inhabitants of the slums, who by reason of recklessness, ignorance and reliance on government doles still produce large families, by no means of the most desirable type. What are the causes of the declining birth rate? A few writers, of whom the chief is Raymond Pearl of Baltimore, believe that the birth rate follows a regular curve, so that they can calculate when the population of the United States will become stationary, and at what figure. This the dean considers either no explanation at all or a kind of fatalism for which he can see no evidence. He holds it much more probable that the reduction in fertility is voluntary; people no longer have large families because they prefer to have small ones. The reason for the sharp decline in the professional class is manifest. Parents cannot afford to give a public school and university education to more than two or three children, and they wish to give their children the same advantages that they have had themselves. Among the less well-to-do the discomforts of an overcrowded cottage, and the ceaseless drudgery of a servantless household, wearing out the working man's wife, already exhausted by too frequent child-bearing, are the chief motives for family restriction. We are told that there is still plenty of room in some of the new countries. So there is for hardy pioneers who are willing to rough it as our early emigrants did. But we seem to be no longer breeding emigrants of this type. There is no country in the world where the man who fails to make good at home has less inducement to seek his fortunes abroad. A grateful country provides him with "bread and games"; by emigrating, he ceases to be a shareholder in a gigantic benefit society of mutual pauperization. Our unemployed will not go, and we cannot make them. Harold Wright, the author of a handbook on "Population," holds that "the silent pressure of excessive numbers on the food supply is now being felt in the form of unemployment, rising prices, and encroachments on the standard of life in the industrial centers." The enormous increase of population in the nineteenth century was due to the position of Great Britain as the workshop of the world. We exchanged our manufactures for food. If the countries that formerly purchased our commodities now prefer to manufacture for themselves, or if we can no longer supply goods at prices which foreigners are willing to pay, we shall not be able to feed our present population, even if some foreign countries still have grain and meat to export. And the food-exporting countries are filling up rapidly. The economic laws which in the last century favored a very dense population are now operating in the opposite direction. The prospect is that machinery may make life more comfortable for the whole population, but only if the numbers are regulated according to the optimum standard for the time being. It does not seem likely that machinery will make food cheaper and more plentiful. The upshot, according to the dean, is that the reduction in the birth rate is imperatively necessary, and that it gives no ground for anxiety or regret, except for the fact that there is an active dysgenic selection caused by the differential birth rates in different classes.

Deaths Under Anesthetics

A coroner, Dr. Waldo, stated at an inquest that the number of deaths under anesthetics had doubled since 1911. The total number due to ether was larger now than that caused by chloroform. With a view to prevention, he suggested that an analyst's certificate of purity should accompany all anesthetic ether; that physicians should be compelled to give information to the coroner of every death due to anesthetics, and that a research committee should be appointed by the government to consider the whole question of anesthetics and to cooperate with the coroner.

A Statistical Review of National Health Insurance

At the meeting of the Royal Statistical Society, Sir Alfred Watson, the government actuary, made a statistical review of "National Health Insurance." He said that the accumulated funds now approached $600,000,000, half of which was represented by valuation surpluses and cognate reserves, which were in course of application to raise the general level of benefits and to extend their scope. He estimated the number of insured workers in October, 1913, as 10,300,000 men and 4,610,000 women. Ten years later these figures had increased to 10,699,000 men and 4,977,000 women, of whom 930,000 were married. The comparatively small increase among men was explained by the war deaths, numbering over 600,000. The number of insured women had been considerably higher; this section of the contributors has decreased since 1918 by the 540,000 following the exodus from industry of women who took up employment during the war. Sir Alfred estimated that 2,630,000 men and 2,633,000 women had entered insurance between 1919 and 1923, and that 60 per cent of them came in at the age of 16, when the compulsory insurance of those in employment begins; more than 1,800,000 men and 3,000,000 women had gone out of insurance in the same period, 820,000 of the women having left industrial employment on marriage. Among both men and women the claims for sickness benefit fell greatly during the war years, particularly in regard to women, who in 1916-1917 drew less than two thirds of the sum drawn by them in 1913-1914. Since the war claims for sickness benefit had again risen, but the cost in 1925-1926 showed that, on the average, sickness among men was still considerably below the level of 1913-1914. Among women the indications were less satisfactory, the figures suggesting that within a short period the earlier level would

again be reached. Comparing the sickness experience of a representative sample of men in the years 1921-1923 with late nineteenth century experience a marked improvement in the health of the community seemed to be indicated, the "rate of sickness" having fallen on the average by about 20 per cent. This was traced to a large reduction, at all ages, in the proportion of the insured who claimed benefit; among men of ages 40 to 45, 160 in 1,000 drew benefit in 1921-1923, against 246 in 1,000 in 1893-1897. The duration of sickness, on the other hand, had increased, the new average at the ages cited being 5.0 weeks per case against 4.3 weeks shown by the older tabulation. Special and not unsatisfactory causes were thought to explain these features. 'It was doubtful whether there was any real increase in the length of incapacity. Among unmarried women the proportion who fell sick was, as a rule, somewhat less than among men of the same age, but the duration of incapacity was much longer, and on the whole, therefore, the average amount of sickness per insured woman was greater than among men. Among married women, both the number claiming and the duration of the claim were relatively greater than among the unmarried; the duration of sickness benefit in the case of a married woman claimant averaged the very high figure of 8¼ weeks.

Disablement benefit (which is entered on when sickness benefit has been paid for twenty-six weeks) is an increasing quantity among all sections of the insured. This is an expected feature as the scheme grew to maturity, and so far as men are concerned the cost is well within the expectation indicated by the older friendly society experiences; but the extent of the claims of women in respect of disablement benefit causes some concern. Taking men and women together, it is estimated that about 200,000 persons are now permanently disabled and drawing benefit from the approved societies. The claims in the winter months average from 50 to 100 per cent more than the summer minimum. Changes in the birth rate are shown by the claims for maternity benefit. The claims among the wives of insured men in 1919-1923 were 88 per cent of those expected by the financial standard. The birth rate (compared with the married population at the reproductive ages) has fallen, it is estimated, by about 20 per cent since the beginning of the century, but, on the other hand, the proportion of the married in the population has substantially grown, the increase being 20 per cent at the ages 20 to 25, 10 per cent at ages 25 to 30, and 5 per cent or more in other age groups.

Longer Lives

Men in this country are living longer than their forefathers, and women longer than men. According to the latest statistics of the registrar-general the average expectation of life for males in England and Wales increased between 1910 and 1924. The mean length of life for men now is 56.58 compared with 39.91 for the period 1838-1854, while women may expect to live till over 60.

JAPAN

(From Our Regular Correspondent)

April 30, 1927.

Regulations Governing Fish Shops

According to an investigation by the police board, the majority of the fish shops are housed in insanitary buildings, especially in the districts devastated by the earthquake of 1923. There are no glass cases, and during the summer the fish are often covered with flies and dust. Sanitary regulations governing fish markets are now being drafted and will be put in force in the near future. Concrete floors, sanitary refrigerators, glass cases, and clean clothing for the shopkeepers will be among the stipulations contained in the proposed law. Severe punishment will be provided for violation.

Baby Protection Day

"Baby Protection Day" will be observed throughout the country, May 5, on the occasion of the boys' festival, which is celebrated to the great joy of all boys under school age according to the Japanese custom. Posters, pamphlets and handbills will be distributed telling how young babies ought to be fed and nursed. Lectures and motion pictures also will be used.

Prize Winners of the Imperial Academy

The Imperial Academy prizes, the chief attraction in Japanese academic circles, have been conferred on seven scientists including two medical men. The imperial prize was given to Dr. G. Kato for his research on decrementless conduction in nerve; and the imperial wedding commemoration prize, from the Osaka *Daily News*, was granted to Dr. Keizo Dohi for his historical study of syphilis. A protest against the conferring of a prize on Dr. Genichi Kato for his new theory of decrementless conduction was made by Prof. Dr. H. Ishikawa of the Kyoto Imperial University Medical College. He sent an open letter to the president of the academy, adversely criticizing the decision on the ground that the theory was still being discussed and was far from being acknowledged, at least by him. His letter concluded with a question asking whether the academy denied his theory and approved Kato's, and required explanation in case of denial of his academic view. These two scientists debated in the general meeting of the Japan Physiologic Society, held at the Okayama Medical College, April 5, and engaged in heated argument. On the last day of the meeting, both sides conducted experiments to close the question, but they did not come to a satisfactory conclusion.

Sudden Increase of Unwarranted Advertisements of "Patent Medicines"

Since the abolition of the "patent medicine" taxes in 1926, more than a thousand "patent medicines" a month are said to have been registered. Exaggerated advertisements also suddenly increased. The metropolitan police board is urging strict regulation, and representatives are visiting every drug store. Among those taken in custody was a millionaire druggist, whose tuberculosis cures have been sold since 1880. In the fifty-second session of the diet, because of this fact, some physician parliamentarians urged the requirement that the ingredients of the contained substance be printed in detail on the packages.

School Children's Brains Work Best on Friday

The Tokyo municipal education bureau has investigated when the brains of elementary school children work best and came to the following conclusion: The system of one instructor teaching two different classes at the same time causes undue mental fatigue to the children. The subject that causes most fatigue is arithmetic; next comes drawing, and next is hard gymnastic exercise. On the contrary, those which lessen fatigue of the brain and increase efficiency are, first, reading; second, geography; third, history; fourth, natural science. The brain work of the children is most efficient at half past ten in the morning, but efficiency gradually wanes until noon. The brain works best on Friday, and least efficiently on Saturday. Girls are readily fatigued by arithmetic, but recover in a shorter time than boys.

The International School Hygiene Conference

The international school hygiene conference was to be held in 1917 in Belgium, but owing to the Great War it was not held and has not, even yet, resumed its sessions. Authorities in Japan, taking the initiative in this matter, proposed to the powers the reopening of the conference. The proposal has aroused some interest.

PRAGUE

(From Our Regular Correspondent)

May 1, 1927.

"Patent Medicines" in Insurance Practice

The problem of medical prescriptions in insurance practice has become a serious question. In 1922, 8.75 per cent of all expenditures was for medical prescriptions. The figure went up to 9.82 per cent in 1924. This has happened in spite of contracts between the insurance bodies and the associations of pharmacists by which the prices to be charged to insurance bodies for medicines have been cut down three times in the course of the last five years. These contracts are concerned only with prescriptions that are written out in full. Therefore, to avoid losses those in the drug trade are introducing "patent medicines" into insurance practice. Most of the "patent medicines" contain simple remedies that would cost less by regular prescription. However, "patent medicines" are easy to prescribe and physicians have been influenced by an intensive advertising campaign inaugurated by the pharmaceutic industry. In some insurance districts, 70 per cent of all the prescriptions were of "patent medicines." Nevertheless, insurance practitioners can obtain adequate remuneration for their services only if the insurance bodies function in an economical way. The condition, therefore, is of especial importance to the medical profession at the time when it is fighting for the introduction of the free choice of the insurance practitioner on the part of the insured, for this measure requires an increase in the cost of medical service. As a result of these considerations, the Young Generation of Czechoslovak Physicians has arranged a course for insurance practitioners which should familiarize them with economical methods of modern therapy.

Public Hospitals

At the recent congress of the representatives of public hospitals it was generally admitted that the condition of these institutions is much improved over the critical condition of the postwar period. The income from a special tax was sufficient to cover the deficits. At present, the bulk of the patients are paid for by the insurance bodies, who are obliged under the law to pay the hospital fees for the insured for a period of at least four weeks in the case of necessity. The expenses of another large group of patients are paid by the provincial government. The present current income of public hospitals is just sufficient to cover their running cost; and as the special tax was voted only for the period which would suffice to extinguish the deficits of the public hospitals, it is likely to be revoked in the near future. On the other hand, funds are badly needed for the improvement of equipment and perhaps construction of new hospitals. The number of hospital beds is considerable, but the hospitals are unevenly distributed. In the less wealthy districts, particularly, new hospitals are needed. Therefore, a resolution was adopted at the congress favoring the continuance of the special tax.

French Statistics of Venereal Disease and Emigrants from Czechoslovakia

French medical periodicals have brought out the fact that venereal diseases are on the decrease in most countries but not in France. An investigation demonstrated that the increase of venereal diseases in France is caused by infections of immigrants and that these cases account for the bulk of fresh venereal infections in France. When the new United States immigration legislation was put into effect, the stream of emigration was diverted to France. Large groups of workmen go from Czechoslovakia to France, where they remain as long as work is available and then in most of the cases return home. It was found that many of them are infected with venereal disease. Dr. A. Měska recently discussed which government is actually responsible for these infections. Those who leave the country are not infected with venereal disease. When laborers are emigrating, a medical examination is carried out in all instances. Although some chronic and latent infections may escape detection, it is impossible that acute infections would be passed by. The examination is repeated often by the French authorities in France. It is evident, therefore, that infections which workmen contract and which impair the French statistics of venereal disease are contracted in France. It would be unfair to say that the French milieu is especially favorable to infection with venereal disease. The fact can be explained by the circumstances in which the workmen find themselves after their arrival in a foreign country. It was demonstrated by war experience that an increase of venereal infections follows wherever large numbers of families are disrupted and men are brought into an environment to which they have not been accustomed. This is a sociological phenomenon which has nothing to do with nationality or temperament. The situation of these emigrants resembles in many respects that of seamen, among whom venereal diseases are widespread. Nothing more can be done from the Czechoslovak side than to educate the emigrants to the dangers to which they will be exposed after their arrival in foreign cities and again treating, after their return, those who have been infected. The rest is in the hands of the authorities of the country to which the emigrants have gone.

Practice in Foreign Countries

The *Bulletin* of the Union of Czechoslovak Physicians has inquired into the possibilities of medical practice in foreign countries for graduates of Czechoslovak medical faculties. This has been suggested as a possible outlet for the overproduction of physicians which is taking place in the country. The result of the investigation is disappointing. Civilized countries are practically shut to emigrating physicians because overproduction of physicians seems to be common to all civilized countries. The only opportunities that remain are in the oriental countries. Even there the prospect is not bright. Governmental service is usually reserved to native physicians, who often have been educated in foreign universities and possess first class qualifications. Foreign physicians are therefore limited to the private practice, and the native population is generally so poor that a physician can hardly make his living from the practice among them. Those physicians who can count on a practice among their countrymen in foreign countries are better off, but Czechoslovak colonies in foreign countries are small. The developing of a parctice among the European population in oriental countries presupposes a knowledge of foreign languages and a considerable investment. The practice in the newly developed colonies is difficult because life is hard there and experience in tropical diseases is necessary. Some openings seem to exist for those who perfect themselves in diseases of tropical Africa and Asia, but the conditions are not very alluring. The inquiry has shown that emigration of physicians will not solve the question of overproduction of Czechoslovak physicians and that the remedy must be sought at home.

Local Office and Dispensary Buildings

In recent years, public health and social institutions have been pooling their resources for the erection of office and dispensary buildings. This movement has been successful, but standardization of the types of such buildings would be beneficial. Therefore, a committee was set up by the National

Council of Social Hygiene to draw up tentative regulations for the construction of such buildings. The committee reports that it is inadvisable to build in small communities and that a combination of several small cities is preferable. The best place for such an institution is the seat of the political administration of the district. Plans of buildings suitable for cities of certain size have been worked out which are at the disposal of the local committees.

Nurses in State Hospitals

The ministry of health has issued a decree regulating the working conditions of nurses in state hospitals. This sets a standard for the employment of qualified nurses which other institutions will have to follow. Nurses under 18 years of age may not be employed in state hospitals. They may marry only after they have obtained the permission of the ministry of health. Only a fixed number of positions for nurses has been created by the decree. The probation period is set for five years. Fixed number of working hours has not been specified in the decree. Nurses are obliged to live in the hospital and to take their meals there, for which they shall pay a small fee. They are entitled to an annual vacation of from seven to eighteen days according to length of service. Their salary is to increase according to a scale which allows for ten increases at intervals of three years. Supervising nurses receive a bonus. A three months' leave of absence with pay is granted to a nurse in the case of pregnancy. At the age of 60 years they are entitled to a life pension. The same holds for invalidity resulting from the service. Positions have been created for assistant nurses, who need not have a diploma but for whom working conditions are less favorable. They are not entitled to a pension.

PARIS

(From Our Regular Correspondent)

April 27, 1927.

The Activities of the Anticancer Center in Lyons

Professor Bérard, director of the anticancer center in Lyons, has published an account of the work of the center in 1926. Treatment was given to 286 patients, while 400 others were examined at weekly consultations. The center has the services of some thirty eminent collaborators, possesses $40,000 worth of radium, and has much roentgenographic and diathermic apparatus. It is unfortunate that 60 per cent of the patients reach the institute too late to derive much benefit from the treatment. M. Bérard advises every one more than 40 years of age to be examined two or three times a year by a competent specialist.

The Pulmonary Type of the Plague

The pulmonary type of the plague has been prevalent in Madagascar for the past five years. A communication on this disease was presented recently by M. Girard before the Société de pathologie exotique. The first cases in a given area are but slightly contagious. One finds, at first, in the expectorations of the patients numerous micro-organisms, in which the causative agent is in the minority. Only gradually, and by successive passages through humans, does a high virulence develop. Finally, pure cultures of *B. pestis bubonicae* are found in the expectorations, the other micro-organisms having disappeared. At that time, the disease becomes exceedingly contagious.

The International Conference on Rabies

The international conference on rabies, organized by the health section of the League of Nations, opened, April 27, at the Pasteur Institute. A large number of countries are represented by official delegates, and the directors of the principal antirabic institutes of the world have made a point to attend the conference in person. The following men were chosen as officers: President, Professor Roux; official representatives, Dr. Madsen, League of Nations; Dr. Calmette, France; Dr. Bordet, Belgium; Dr. Kraus, Austria; Dr. MacKendrick, Great Britain; Dr. Bujwid, Poland; Dr. Pfeiffer, Germany; Dr. Zlatogoroff, Union of the Socialist Soviet Republics; Dr. di Vesta, Italy, and Dr. Jitajoma, Japan. The conference will hold morning and afternoon sessions, during the week, at the Pasteur Institute.

A Franco-British Scientific Meeting

The association of otorhinolaryngologic surgeons of Great Britain has just held its annual session at the Faculty of Medicine of Bordeaux, in the clinic of Professor Portmann. Last year, this group of scientists held its annual meeting in Austria, at the University of Vienna. It was in honor of the French otorhinolaryngologists that the British surgeons, in coming to France for the first time, chose Bordeaux as their place of meeting.

The Vulpian Centenary

The hundredth anniversary of the birth of the great French physiologist Vulpian is to be celebrated by appropriate ceremonies held at the Faculty of Medicine, of which he was dean; at the seat of the Société de biologie, of which he served many years as the president, and at the Hôpital de la Salpêtrière, in which he had his service. The celebration will cover a week (May 27-June 2). Foreign countries have been invited to send delegates, and a number of unpublished scientific articles will be presented on the occasion. With this festival, toward the expenses of which the municipal council of Paris has granted $200, will be combined the eighth Réunion neurologique internationale and likewise the celebration of the centenary of the death of Pinel, another physician of the Salpêtrière, who immortalized his name by having been the first to relieve insane persons of their chains, deliver them from close confinement in prisons, and open special hospitals for them.

Homage Paid to Physicians Who Lost Their Lives in the War

A celebration was held at the Faculty of Medicine of Paris to pay homage to the physicians who lost their lives in the World War. It was organized by the Association des anciens médecins des corps combattants, the president of which is Dr. Clovis Vincent, agrégé professor at the Faculty of Medicine, physician to the hospitals of Paris, and, furthermore, a well known neurologist. All the professors and the head physicians of the Service de santé militaire (army medical corps) were present. M. Clovis Vincent, in his address, pointed out that the civilian physicians mobilized for the war had suffered a greater mortality than any other category of officers. He recalled also the example of self-abnegation and the spirit of sacrifice that they had bequeathed to future generations.

Deaths

Dr. Charles Foix, physician to the hospitals of Paris and agrégé professor at the Faculty of Medicine, has died at the age of 41, from a sudden hemorrhage due to a duodenal ulcer. Foix was the author of a number of treatises on neurology, which deal more particularly with methods of cerebral localization. French neurologists based great hopes on his future development, many thinking that he would be a second Charcot.

Gouzien, *médecin inspecteur de la marine*, one of the most eminent figures in naval and colonial medicine in France, has died, his death following very shortly his retirement. He had played an important part in the organization of the sanitary services in the French colonies, at the international congresses and at the international bureau of hygiene.

The physiologist Paul Regnard, who has just died, had been a pupil of Claude Bernard and of Paul Bert. He was a collaborator of the latter in the preparation of their celebrated articles on atmospheric pressure. He had likewise been devoted, along with Dastre, to researches on the nervous system. He was director of the Institut agronomique and member of the Academy of Medicine.

ITALY

(From Our Regular Correspondent)

April 15, 1927.

The Successor of Professor Gradenigo

Professor Deodato De Carli has been appointed director of the Clinica Otorinoiatria in Naples, to succeed Professor Gradenigo.

Institute for the Treatment of Adenoidism

With a view to improving the physical and mental development of the child, the government of Rome has recently organized an institute for the treatment of adenoidism, which, in addition to an operating room and a waiting room for patients, contains chambers for the collective inhalation of vapors of halide salts or calcium, or for individual inhalations of various medicinal substances that the patient may be found to need. The director of the new institute is Professor Mancioli, who, at the dedication exercises, after explaining the purpose and the mode of functioning of the institute, exhibited a scientific film on the treatment of adenoidism.

Improvements to Be Made at the University of Genoa

For the construction of various institutes at the University of Genoa, the national government has authorized a loan of 13,000,000 liras.

Adoption of New Criteria for the Recording of Causes of Death

The first of the year, new criteria for the recording of data relative to vital statistics were adopted, and by a recent circular the president of the Istituto centrale di statistica calls the attention of physicians to the application of the rules so far as they concern them. In order that families may make death announcements to the authorities, the attending physician provides them with a blank, the form of which has been recently somewhat modified. Importance is now attached to the point as to whether the death occurs at the home of the patient or at the hospital, since such records, together with others, serve to establish the percentage of mortality in relation to the actual population of a region. In addition to the record blank has been added a part (entirely new) which refers to infants who die under 1 year of age, and which establishes the kind of food used—whether breast feeding, cow's milk, artificial foods or a mixed diet. Concerning violent deaths, it is necessary to indicate, even though it is a question of suicide or homicide, the cause of death, in a clear manner.

The Death of Leonardo Bianchi

While he was taking part in a discussion on narcotics as a factor in human degeneration, Leonardo Bianchi, the celebrated psychiatrist, died suddenly, February 13. Born in S. Bartolomeo, Benevento, April 5, 1848, Bianchi was graduated at the University of Naples in 1871. He devoted himself for many years (1876-1888) to the study of pathologic anatomy of the nervous system and to experimental researches in vivisection. In 1888 he secured, by competitive examination, the chair of psychiatry at the University of Palermo, and in 1890, after the death of Bonuomo, he was appointed director of the Clinica di Napoli. He founded in Naples a center for neuropsychiatric studies, in which many eminent clinicians received their training. His scientific researches, after his appointment as director of the Clinica di Napoli, were directed to the study of the following subjects: the localization of the highest intellectual functions in the prefrontal lobe; the zones of association; aphasic dementia as the effect of word deafness, and the syndrome of lesions of the parietal lobe (Bianchi's syndrome).

He was at first the editor of the special journal *Psichiatria, neuropatologia e scienze affini* and later became its general manager, the name of the journal being afterward changed to *Annali di neurologia*.

Bianchi served as dean of the medical faculty and for two terms as rector of the University of Naples. He was also the recipient of many other high national and foreign honors. He was made doctor honoris causa by the University of Manchester. He was a member of the principal Italian academies of medicine, member of the chamber of deputies for five terms, minister of public instruction, and minister of the Assistenza Sanitaria. For many years he was "senatore del regno."

BERLIN

(From Our Regular Correspondent)

April 30, 1927.

The Decline in Germany's Birth Rate

In an address before the Deutsche weltwirtschaftliche Gesellschaft, Prof. A. Grotjahn warned against the view that bad economic conditions are the cause of the decline in our birth rate and that when conditions improve the birth rate will rise. In general, economic stress and poor housing facilities may cause a fall in the birth rate, but improvement is not likely to come automatically. The dangerous factor lies in the downward tendency, which was observable in the prewar period and which has since become more accentuated. Fifty years ago, there were forty-two births per thousand married couples; in 1914 the number dropped to twenty-nine, and now it is only twenty-one, and in Berlin only fourteen. The low mortality (today 13 per thousand population) gives the impression that the population of Germany is increasing. But the low mortality is due merely to the fact that the age groups, as a result of the postwar period, which caused an exceedingly heavy mortality among the sick, the war shattered and the aged, have a changed distribution and that the middle age-groups with a lower mortality are at present more strongly represented. The effects of the decline in the birth rate will, therefore, not become so apparent for a number of years. Before the war, the explanation for the decline in the birth rate was the increase in wealth; wealthy persons, it was said, had fewer children. Now the common argument is that lack of means is keeping the birth rate down. The medical man, however, sees the salient factor in birth control. Statisticians, political economists and statesmen whose duty it is to watch over the welfare of the nation ought to give greater attention to this movement. Just as the introduction of the steam engine produced revolutionary changes, so likewise birth control is likely to exert a revolutionary effect on society. Professor Grotjahn advised that all talk of an overpopulation of Germany be stopped, since it offered a dangerous suggestion and implied an excuse for birth control. He called attention to France, which is combating the decline in the birth rate by the application of country-wide economic preventive measures. The French methods, to be sure, are not in all respects applicable to German conditions, but the insurance of the heads of large families by privately conducted insurance organizations would doubtless exert a successful counteracting influence on the present downward tendency of the birth rate.

BUENOS AIRES

(From Our Regular Correspondent)

April 15, 1927.

University Disturbances

Chronic unsettled conditions have prevailed in the universities of this country since the students were allowed to participate in the election of school officers. New acute crises have recently developed in the Buenos Aires and Rosario medical schools. In the Buenos Aires school, a new dean had to be elected by a vote of an equal number of professors, assistant professors and students' delegates. As the professors always divide their votes among two or more candidates and many abstain from voting, as a silent protest against the present system, the result is that the student faction, voting as a unit, always decides the issue. In the recent election Drs. Arce and Lanari were the candidates for the deanship. The campaign was violent, and personal attacks through posters, pamphlets and even improvised journals became the rule. At the election of the students' delegates, a climax was reached, as all kinds of promises were made, voters were brought in automobiles and charges of electoral frauds were made on both sides. Dr. Lanari secured a slight majority in the students' preference vote. On election day at the medical school, the acting dean, Dr. P. Belou, closed the doors to everybody, including professors, pending a decision by the university superior board as to whether the school directing board should also be reelected. The superior board decided the present school authorities should continue to serve until September. The postponement of the elections and the continuance of the school board were taken by the students as evidence of a tendency to frustrate the appointment of their candidate. They therefore forced their way into the school and compelled the acting dean, Dr. Belou, to resign; but the resignation was recalled by Dr. Belou the next day, he claiming that it had been signed under duress. Dr. Romano, the oldest councilor, then became acting dean, against the protest of almost the whole directing board. At this juncture, the superior board ordered Dr. R. Rojas, the rector of the university, to take charge of the management of the school and also of the election. When this was held, eighty-four professors refrained from voting; fifty-nine students' delegates and forty-four professors cast their votes, electing almost unanimously Dr. Lanari, a former dean and a much respected professor. Dr. Arce had withdrawn a few days previously.

At Rosario, a new dean was also elected. Dr. R. Araya, to whom the school owes a great deal, was unable to secure the necessary two thirds of the votes for reelection. Dr. J. A. Gatti was elected dean, and not being the students' candidate, his resignation was demanded. He refused, but had to agree to grant a certain voice to the students in the school management.

Impressions of the United States

Dr. J. T. Lewis, who received a Harvard scholarship from the Rockefeller Foundation, has praised the moral and intellectual environment in American universities. Dr. Lelio Zeno has described enthusiastically his impressions about surgical centers in Rochester and New York City. Dr. P. Jáuregui, in a fifteen days' stay, did not find anything new or interesting. He thinks Argentine physicians will find better teaching in Europe. Prof. P. Escudero visited especially hospitals and clinics devoted to diabetes in order to use the result of his observations in organizing a municipal diabetes clinic. Progress in the United States, he says, is due as elsewhere to work and personal worth, not to money, as some claim. An Argentine physician can learn much if he knows where to go. English is essential, as Americans are unfamiliar with foreign languages. Escudero found something new only in Joslin's service, with its sections of general and orthopedic surgery and training for patients. He found everywhere diet too standardized instead of being studied individually for each patient. What astonished him most was the almost complete ignorance of South American geography, life and culture. In general, in the United States they hardly know the scientific work of Latin countries. Escudero praises the courtesy of American physicians and thinks closer bonds should be established with them.

Outings for Weak Children

The National Board of Education has organized a series of outings for weak children. Each group includes 400 children.

Malaria

The federal system of government often prevents securing prompt and uniform action in health matters. In order to coordinate efforts the secretary of the interior has requested the cooperation of the authorities in the provinces of Salta, Jujuy, Tucumán and Catamarca, which are those suffering most from malaria. Dr. A. Barbieri, chief of the malaria division of the national health department, will visit the different authorities with a view to securing their support. At Tilcara, Jujuy, steps are being taken to organize a country home for children convalescing from malaria.

Plague

Outbreaks of plague have occurred at Caña de Luque and Serrezuela, Córdoba. One was of the pneumonic type and caused eighteen deaths. Prevention and disinfection measures seem to have been effective as new cases were not reported. In order to avoid the development of endemic foci in rats the national health department has organized disinfection stations in every port. It has also tried to interest the railroad companies in ratproofing their platforms and storehouses. These companies, mostly foreign, have shown but little desire to comply, shielding themselves behind the terms of their franchises. At Buenos Aires the health department has put to work trapping squads. The Buenos Aires Public Assistance is also carrying out an antirat campaign.

Trips to Germany

The German steamship companies have begun to organize postgraduate tours to Germany. The first contingent has just returned after a four months' trip. The excursion was headed by Drs. Wernicke, Gollan, Calatroni and others. During their stay at Berlin, Dresden, Nuremberg, Cologne, Munich, Heidelberg and Vienna, the Argentine physicians were much fêted.

Lectures by Foreign Professors

Professor Brumpt of the Paris Faculty of Medicine gave a series of demonstrations and lectures on amebas, spirilla infections and leishmaniosis. According to Brumpt the four nuclei cysts found in Buenos Aires are not always from dysenteric amebas. They often belong to *Ameba dispar,* which he has identified, and also to *A. hartmanni,* so prevalent at Montevideo. Stutzin, privatdozent at the University of Berlin, has arrived to give three lectures on urology. Prof. A. Herlitzka, the physiologist from the Turin medical school, will arrive soon to give lectures on medicine and aviation and other subjects.

Personal

Gen. Julio Garino and Lieut. Col. C. C. Matta of the Army Medical Corps have been appointed delegates to the fourth Congress of Military Medicine and Pharmacy, to be held at Warsaw.—The Rockefeller Foundation has given a fellowship in biologic chemistry to Dr. J. T. Muñoz.—Dr. Angel Gallardo has been made a corresponding member of the Paris Academy of Medicine.

Marriages

PERCY BERNARD DAVIDSON, Boston, to Miss Christina McDonald A. Held of Evanston, Ill., April 16.

VICTOR J. WEISS to Miss Mabel M. White, both of Kansas City, Mo., at Dallas, Texas, April 21.

WILLIAM F. KELLY to Miss Sarah I. Sweeney, both of Philadelphia, February 12.

ENOCH H. ADAMS, Danville, Pa., to Miss Freda Gingher, March 9.

Deaths

Frederick William Parham ✠ New Orleans; Medical Department University of Louisiana, New Orleans, 1879; professor of general and abdominal surgery, New Orleans Polyclinic, 1888-1924; past president of the Southern Surgical and Gynecological Society, the Louisiana State Medical Society and the Orleans Parish Medical Society; member of the American Surgical Association and the American Association for Thoracic Surgery; on the staffs of the Touro Infirmary and the Charity Hospital; chief sanitary inspector of New Orleans, 1890-1892; aged 71; died, May 6.

Samuel Westray Battle ✠ Asheville, N. C.; Bellevue Hospital Medical College, New York, 1875; retired as lieutenant junior grade, U. S. Navy in 1884; served for many years with the North Carolina National Guard; formerly member of the state board of health; honorary medical director of the Biltmore (N. C.) Hospital; aged 72; died, April 29, at the Rex Hospital, Raleigh, of cerebral hemorrhage.

Alexander Abraham Weagant, Winnepeg, Man., Canada; McGill University Faculty of Medicine, Montreal, Que., 1888; member of the Associated Anesthetists of the United States and Canada; formerly on the staff of the Protestant Hospital, Ottawa, Ont., and for five years member of the Ontario Provincial Board of Health; aged 61; died, March 3, following a long illness.

Morton P. Dickeson ✠ Media, Pa.; Medico-Chirurgical College of Philadelphia, 1887; formerly member of the state board of medical examiners and state board of health; physician in charge of a hospital bearing his name; aged 62; died, May 9, at the National Stomach Hospital, Philadelphia, of sarcomatosis.

Frederick Stewart Baron, Zanesville, Ohio; University and Bellevue Hospital Medical College, 1900; member of the Ohio State Medical Association, and the American Academy of Ophthalmology and Oto-Laryngology; aged 53; died, April 24, at the Good Samaritan Hospital.

John Reynolds Brown ✠ Tacoma, Wash.; Northwestern University Medical School, Chicago, 1899; past president of the Washington State Medical Association; member of the American College of Physicians; aged 62; died suddenly, May 7, of heart disease.

Mary E. Carleton, Ming Chiang, China; Syracuse (N. Y.) University College of Medicine, 1886; a medical missionary in China under the auspices of the Methodist Episcopal Church from 1887 to 1925; aged 69; died, April 18, at Utica, N. Y.

James P. Ellis, Augusta, Ill.; College of Physicians and Surgeons, Chicago, 1890; member of the Illinois State Medical Society; formerly postmaster, police magistrate and mayor; aged 69; died, April 30, of acute edema of the lung.

J. P. Whitehead, Rocky Mount, N. C.; University of Maryland School of Medicine, Baltimore, 1899; member of the Medical Society of the State of North Carolina; aged 54; died, April 11, at a hospital in New York, of acute colitis.

Frank Carlton Coombs, Kingsville, Ohio; Cleveland Homeopathic Medical College, 1900; member of the Ohio State Medical Association; aged 65; died, April 2, at the Huron Road Hospital, Cleveland, of diabetes mellitus.

Henry Smith Mathewson ✠ Providence, R. I.; Columbia University College of Physicians and Surgeons, New York, 1893; Senior Surgeon, U. S. Public Health Service; aged 60; died suddenly, May 8, of heart disease.

John Payne Browne ✠ Plainfield, Ill.; Medical Department of the University of Illinois, Chicago, 1905; for seven years president of the school board; aged 62; died, May 3, of progressive muscular atrophy.

Edward Joseph O'Donnell, Los Angeles; Dartmouth Medical School, Hanover, N. H., 1865; Civil War veteran; formerly member of the Kansas State Legislature; aged 91; died, April 6, of senility.

Victor I. Englert, Chicago; Washington University School of Medicine, St. Louis, 1906; member of the Illinois State Medical Society; aged 56; died, April 11, of chronic ethmoid and sphenoid sinusitis.

Idus L. Bradley, Little Rock, Ark.; University of Arkansas Medical Department, Little Rock, 1909; aged 45; died, March 26, at the Little Rock General Hospital, of a gunshot wound.

Syrena Andrews Perry, Webster City, Iowa; Bennett College of Eclectic Medicine and Surgery, 1882; died, April 30, at Bradenton, Fla., as the result of an injury received in a fall.

Henry Collins Rogers, Muskogee, Okla.; Memphis (Tenn.) Hospital Medical College, 1888; member of the Oklahoma State Medical Association; aged 60; died, April 18, of uremia.

Elizabeth Mandell Sturgis ✠ New York; Woman's Medical College of the New York Infirmary for Women and Children, 1895; aged 55; died, March 22, of pneumonia.

William A. B. Kerr, Cincinnati; Eclectic Medical Institute, Cincinnati, 1899; on the staff of the Evangeline Booth Home and Hospital; aged 62; died, March 10, of pneumonia.

Frank Meikle Brown, Montreal, Que., Canada; McGill University Faculty of Medicine, Montreal, 1924; aged 28; died, May 9, of a self-inflicted bullet wound.

Samuel Maurice Barnes ✠ Jarbridge, Nev.; Howard University School of Medicine, Washington, D. C., 1891; aged 57; died, February 26, of heart disease.

Warren D. Blatchley, Fort Scott, Kan.; Physio-Medical Institute, Cincinnati, 1877; aged 76; was found dead in the bathroom, March 22, of heart disease.

Charles Chambers Cocklin ✠ Harrisburg, Pa.; University of Pennsylvania School of Medicine, Philadelphia, 1894; aged 64; died, May 7, of pneumonia.

Howard Lawrence Coles, Tarrytown, N. Y.; New York Homeopathic Medical College and Hospital, 1895; aged 59; died, May 8, of heart disease.

Emelious A. Cox, Teague, Texas (licensed, Texas, under the Act of 1907); aged 53; died, in February, following an operation for appendicitis.

Howard S. Gordon, Nuevo, Calif.; Kansas City (Mo.) Medical College, 1878; aged 74; died, January 24, at Santa Ana, Calif., of paralysis.

William J. McCurdy, Memphis, Tenn.; University of Georgia Medical Department, Augusta, 1883; aged 67; died suddenly, in April.

Emil E. Tanner, Milwaukee; Wisconsin College of Physicians and Surgeons, 1898; agel 60; died, February 27, of diabetes mellitus.

Walter S. Blaisdell, Punxsutawney, Pa.; College of Physicians and Surgeons, Baltimore, 1890; aged 60; died, April 28, of heart disease.

G. H. Dye, Mill Creek, Okla.; University of Georgia Medical Department, Augusta, 1892; aged 79; died, April 4, of heart disease.

Merritt Caldwell Bragdon, Evanston, Ill.; Hahnemann Medical College of Philadelphia, 1873; aged 77; died, May 10, of pneumonia.

Jason S. McCants, Osceola, Ark.; Atlanta Medical College, 1866; Confederate veteran; aged 85; died, April 30, of heart disease.

Mon Fong Young, Kansas City, Mo.; South China Medical College, Canton, 1889; died, February 26, of cerebral hemorrhage.

Nathaniel Hawthorn Keyes, Covington, Tenn.; Meharry Medical College, Nashville, 1911; aged 47; died, April 24, of nephritis.

John C. Testerman, Jefferson, N. C. (licensed, North Carolina, year unknown); aged 68; died, April 23, of heart disease.

Wiley W. Foust, Robbins, Tenn.; Tennessee Medical College, Knoxville, 1895; aged 54; was shot and killed, March 5.

W. O. Denman, Greenup, Ill.; Eclectic Medical Institute, Cincinnati, 1874; aged 76; died, April 24, of myocarditis.

Arthur B. McGill, Cincinnati (licensed, Ohio, 1896); aged 83; died, April 24, of mitral insufficiency.

Correspondence

HELMINTHIC THERAPY

To the Editor:—I have read with great interest "A Contribution to Helminthic Therapy," by M. Fernán-Núñez (THE JOURNAL, March 19).

Dr. Núñez's results represent a careful study which is concisely and attractively presented. I am in accord with all his conclusions, but feel that Conclusion 6 should be amplified. He states that:

> Oil of chenopodium by intramuscular or intravenous injection is specific against *Trichocephalus* and *Oxyuris*, the two most difficult nematodes to eliminate.

The drug is specific for these parasites if given intravenously or intramuscularly, but it is also *very toxic*.

We have been using oil of chenopodium for about ten years in the treatment of helminthiasis and have studied this drug carefully. Since the drug is so specific in its action on nematodes, Pessoa and I, working in Brazil, hoped that it might be possible to use the drug in the treatment of parasitic nematodes that invade the circulation, such as in filariasis and trichinosis. We therefore experimented on dogs by administering chenopodium intravenously and examining the dogs by autopsy at varying periods after injection. We already knew from clinical and pathologic experiments that the drug when given by mouth in treatment of hookworm disease might be very toxic if absorbed into the circulation. When we treated dogs with chenopodium intravenously we found that immediate and very severe symptoms of intoxication were produced. On autopsy we determined that serious injury had been caused to the tissues of the brain. The drug often produced petechial hemorrhages; sometimes these hemorrhages were extensive and diffuse. Hemorrhages sometimes occurred in the lungs. Under these circumstances we felt that the drug could not be used with impunity by either the intravenous or the intramuscular route, and gave up the possibility of its employment in the case of filariasis or trichinosis.

In the meantime, in 1921, one of our staff, Dr. S. M. Lambert, working in the Far East, had experimented with intravenous and intramuscular injections of oil of chenopodium in a few human cases. In Dr. Lambert's experiments, severe toxic symptoms were produced with from 1 to 2 cc. of oil of chenopodium given intravenously. The most striking symptoms were marked slowing of the pulse, immediate syncope, marked salivation, hiccup and prolonged vomiting. Prostration was pronounced and continued over several hours. In Dr. Lambert's cases the drug was found very effective in the removal of *Trichocephalus* and *Oxyuris*, but the method was not effective in removing hookworms or *Ascaris*. In view of the extreme severity of the toxic symptoms, the experiments were not continued.

Dr. Núñez notes on page 904:

> In susceptible patients, intravenous injections of *any substance* may produce attacks of syncope, with slowing of the pulse, and at times vomiting and hiccup. Therefore, in intravenous injections of oil of chenopodium, one should observe the same precautions as in any other intravenous treatment.

Apparently the patients treated by Dr. Núñez had toxic symptoms similar to those noted by Dr. Lambert; namely, syncope, slowing of pulse, hiccup and vomiting.

Now *Trichocephalus* does not, as a rule, produce severe or extensive lesions. It is a very common parasitic infection in the United States and is, in fact, one of the most cosmopolitan of all intestinal helminths, probably *the most widely distributed*, except *Ascaris*. In our work in Alabama, Florida and Tennessee during the past three years we have seen many thousands of individuals affected with this parasite but in no instance did we observe any symptoms that could be attributed to the worm. There are many cases on record, of course, in which definite clinical symptoms have been shown to have been produced by this parasite; but in view of the fact that, by and large, the disease causes relatively little harm, we feel that it is an unwarranted procedure to recommend intravenous or intramuscular injections of oil of chenopodium in the treatment of the disease.

W. G. SMILLIE, M.D., New York.

THE USE OF CATHARTICS

To the Editor:—I appeal to the fountainhead of medical knowledge for information on a subject of greatest personal and community importance. Shall I take a physic? And shall I give a physic to practically all my patients? I have not taken a physic for more than fifteen years and am in perfect health. My intestinal exit operates as faithfully as the inlet, with an almost unvarying ratio of one to three. Traffic occasionally slows up a bit and as a consequence terminal unloading facilities may be put to some test, but this is never extreme and there have been no failures nor needed repairs. Once in a long time I have a cold but in no instance has a cold ever slowed up deliveries. Years ago I always took a physic for my colds, which always did two ugly things to me: They always gave me a bellyache and disturbed my regular evacuating habits. My colds without physics are just as brief as those subjected to the foregoing complications.

Now as to my patients. They all want a "thorough cleaning out" and a change in diet. Advances in scientific medicine and a group of diet trade journals have put a lot of discontent in the minds of my patients about what they should eat in order to be able to live, and, as the last congress adjourned without providing any new foods, I am frequently distressed with my inability to supply new formulas and combinations; but I am not now asking for any relief in this particular. However, I do want enlightenment on the contention that if the patient suddenly shows a little fever or a subnormal temperature, or restlessness, or tympanites or a collapsed abdomen, or frequency of bowel movements or a total stoppage, or numbness of the first three fingers on the right side, or anorexia, or a gluttonous appetite, or nausea, with or without vomiting, or a sudden dislike for the male parent, that such a patient should at once have a physic. And if so, what? and when? and how long?

A new treatise on skin diseases just came to my notice, and in going through it in a quick review, my memory may not serve me perfectly but I can now recall just one condition that did not require a "purge," a "physic" or a complete overhauling of the entire eliminating machinery, and that was freckles. I was pleased, as I have freckles and it may be safe to go right on neglecting my bowels as heretofore with safety. I have no more trouble keeping my bowels regular than my nose Roman, and I have about come to the conclusion that, colds or no colds, I need plastics for my nose just as frequently as physics for my bowels, and that's that.

Such limited reading of last editions as I do gives me scant support for my aversion to purges and "thorough cleaning out of the intestinal tract." My frequent contact with physicians convinces me that I do far less cleaning out than they do, and when it comes to toning up a liver with laxatives I am almost a total failure. I try. In this community one simply must be able to do considerable in the way of toning up livers. It seems that we live in the toneless liver belt; and since Marshall Field established that the customer is always right, we must tone 'em up as per general request, or they will get another tuner. I do not know whether the people or the physicians established this belt, but it's here

all right and we live in the center of it. It is not without its advantages as I am planning to send both of my girls away to school, but I am losing confidence in my toning abilities. At a recent meeting of our society I informed my confrères (you may be surprised that there are confrères this far from a large medical center) that I was making no effort to transform my "cold" cases into dysentery cases, and now I wish I had not for I fear I lost caste or something. One of my confrères recently purchased a full barrel of aromatic cascara. Do you think he got enough?

In your reply you treat lightly my personal problem so I have practically decided to maintain the status quo; but I am very much interested in the present attitude of advanced medicine with regard to laxatives for bunions, etc. I am of the opinion that there are something like a hundred thousand of your readers interested in this subject.

What laxative works best in a poultice?

E. O. HARROLD, M.D., Marion, Ind.

"INTERNATIONAL HEALTH INSTITUTE"

To the Editor:—I was much surprised and humiliated in looking through THE JOURNAL, April 30, to find on page 1435, under the "Propaganda for Reform," your investigation of the International Health Institute, with my name listed as on the advisory board.

It is true that I did send in my name, signifying my willingness to be examiner for them, but of course had no idea that it was any such a layout as THE JOURNAL has proved it to be. I took this step without investigating the matter at all for which I am certainly sorry, and I am enclosing a letter which I have written to the International Health Institute asking them to take my name off the reference board.

J. SEVERY HIBBEN, M.D., Pasadena, Calif.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

DISTURBANCES OF THE COCCYX

To the Editor:—A patient of mine, a married woman with two children, complains of symptoms of coccygodynia. I feel that this diagnosis is correct. The case is of at least three years' duration, and while not disabling is at times very uncomfortable. While I could refer her to the city for further advice, I thought before doing so I would obtain from you the following advice: 1. What is the usual treatment (mention the use of diathermy as I have such apparatus)? 2. Is surgery successful, and is the convalescence an unusually painful one? 3. All considered, what is the best treatment for a case of two or three years' standing? 4. Roentgen ray and palpation do not seem in this case to reveal any deformity, yet the patient is not a neurasthenic.

LEE W. PAUL, M.D., Ilwaco, Wash.

ANSWER.—The coccyx represents the remains of the anthropoid tail, for which reason it is often referred to as the "tail bone." Its function in man is to afford attachments to muscles. These do not, however, suffer by its removal.

The anatomy of this region is briefly as follows: The coccyx consists of four segments, joined together, making a cone shaped structure which articulates above with the sacrum, forming the sacrococcygeal joint. Four important muscles are attached to the coccyx: the gluteus maximus posteriorly, the coccygeus anteriorly, the sphincter ani to the tip in front, and the levator ani to the tip behind. The sacrococcygeal ligaments are found above. The nerve supply of this region is derived from the posterior divisions of the coccygeal and second, third, fourth and fifth sacral nerves plus the anterior divisions of the fifth sacral and the coccygeal nerves.

The most important clinical disturbances of the coccyx are "dislocation," tumors and disease, the first of which is so much more important than the other two that it alone will be discussed.

Symptoms of "dislocation" of the coccyx are pain, coccygodynia, especially on sitting. Patients complain of inability to sit through a movie show or a theater performance, of pain while riding horseback, and so on. They must squirm and twist to be comfortable. Many patients complain of pain while defecating. Roentgenograms often do not reveal demonstrable pathologic changes and the surgeon must rely on the history and physical examination. The history is usually that of a fall and forcibly sitting down, or of a blow or kick. Many patients have tried hot sitz baths and sitting on a rubber ring, with variable relief.

Rectal examination is of value. With the patient lying on the left side with the knees and hips flexed, the right index finger is inserted into the rectum and the thumb placed over the coccyx outside that structure. If there is abnormal mobility at the sacrococcygeal articulation and accompanying sensitiveness and tenderness, the diagnosis is made.

The pathologic changes are usually structural, but cases of tuberculosis have been reported and tumors, especially teratomas, are often found in this region. Many patients with coccygodynia have arthritis of the lumbosacroiliac region and it is important to bear in mind that removal of the coccyx does not cure the arthritis higher up. The operative relief in selected cases should be constant.

The treatment is operative. A midline incision is made in the median raphe; with a finger of an assistant constantly in the rectum as a guide, a careful dissection is made and the coccyx is removed at the sacrococcygeal joint. Two or three deep and two or three superficial silkworm sutures and collodion-gauze dressings suffice.

PETECHIAE — LACTIC ACID MILK — HAINES' TEST FOR SUGAR

To the Editor:—1. I have a patient who develops typical petechiae, which occur on the left side of the neck and chest and the left anterior axillary fold. They occur with almost perfect regularity every two weeks. The patient believes that they are more likely to occur when she is very tired, but also states that they occur just prior to or just after the menses. There is no rise of temperature. There are no constitutional symptoms other than perhaps a little soreness of the muscles, and maybe some numbness of the left arm. Petechiae are not found elsewhere on the body. The heart is normal, no murmurs being heard. The patient first noticed the petechiae about two years ago, or shortly after the birth of a healthy child. The physical observations, except for retroversion and a slight erosion of the cervix, are negative. Could you tell me what their cause might be and their significance? 2. Please give me a formula for making lactic acid milk. 3. Recently in testing urine with Haines' solution, I obtained a decolorization only when using several cubic centimeters of urine. I thought the specimen positive, since the specific gravity was well over 1.030. I emptied the tube and without washing it put in more Haines' solution to retest. I was surprised to obtain a complete reduction when the solution boiled without the further addition of urine. I then emptied the tube, washed it thoroughly and retested, finding that a single drop of the specimen gave a complete reduction of Haines' solution, but that a decolorization only was obtained when several cubic centimeters of urine were used. Since then this has occurred with urine from a second diabetic patient. How is this explained? Please omit name.

M.D., South Dakota.

ANSWER.—1. Such a one sided, recurrent petechial eruption suggests some local blood vessel involvement, the attacks being brought on, perhaps, by periods of low blood pressure. Further study with this in mind, a search for focal infection and a careful study of the blood to rule out the possibility of leukemia would seem to be in order. It is assumed that the patient is on a proper diet and that she is not taking drugs that might bring on skin hemorrhages.

2. Formulas for lactic acid milk vary as do other milk formulas for infant feeding.

When the infant is very young, a lactic acid protein milk powder (for accepted brands, see description in New and Nonofficial Remedies) is generally used, suspended in water to which is added sugar or dextrin-maltose. For older infants milk is used with lactic acid, based on the caloric requirements of the baby. For instance, for a baby weighing 10 pounds (4.5 Kg.), the following might be prescribed.

Milk	600 cc. (20 ounces)
Barley or oatmeal water	300 cc. (10 ounces)
Dextrin-maltose	40 Gm. (3½ level tablespoonfuls)

Heat to boiling, cook and add 4 cc. (1 teaspoonful) of lactic acid U. S. P. This will make five feedings of 180 cc. (6 ounces) each, and the infant will be obtaining approximately 20 cc. of fluid per kilogram of body weight (3 ounces of fluid per pound).

3. It is an everyday occurrence in the experience of those testing many specimens of urine that the addition of a large

amount of urine to a few cubic centimeters of Haines' solution and boiling results in relatively less reduction of the copper solution than when a few drops of urine are used. In fact, the instructions given in all textbooks for using these copper solutions in testing for sugar in the urine direct that only a few drops of urine be used. The reason for the addition of the small amount of urine, rather than a large amount, is self-evident when one considers that glucose has the property of holding in solution not only the cupric hydrate of the original Haines' solution but also the cuprous hydrate formed by the reducing action of the glucose. It is true that there are many other substances in normal and abnormal urine which have this same property to a more or less degree. Among these we find ammonium compounds, albumin, uric acid, creatinine, allantoin, alkaptone acids and glycuronic acid.

When only a small amount of sugar is present in the urine examined, there may be little or no reduction observed when the urine is added to Haines' solution, even when the boiled mixture is allowed to stand for some time, because the cuprous hydrate formed is so small in amount that it is held in solution by the sugar present, just as is the case with uric acid and creatinine. When the amount of sugar is large, as in the case of the specimen in question here, the addition of a large amount of urine will result in the holding in solution of the cuprous hydrate to a large extent and the formation of a precipitate only when the solubility constant of glucose for cuprous hydrate is exceeded. This is the reason that only decolorization may be observed when large amounts of urine are added, while a prompt reduction is observed after the addition of only one drop. This was the experience of our correspondent. Thus, only a discoloration was obtained on the addition of several cubic centimeters of urine; on emptying the tube and adding more Haines' solution, a reduction promptly occurred because there was enough urine (sugar-containing material) left in the tube to produce a reduction. On now washing out the tube and adding fresh Haines' solution, a drop of urine produced a prompt reduction, because the solubility constant of cuprous hydrate in the glucose present was exceeded and precipitation must occur. This experience should teach those who have to do with the examination of urine to follow instructions and add only a few drops of urine to the copper solution when testing for sugar. While it is true that urines containing only a small amount of sugar may not show reduction under these conditions, yet if sugar is present in pathologic amounts a precipitate must settle out, provided the reducing action is greater than the solvent action of the glucose. If the amount of glucose is large and a large amount (several cubic centimeters) of urine is added to the copper solution, very disturbing reactions may occur and markedly pathologic urines may show paradoxical results.

ACCIDENTAL TRANSMISSION OF THERAPEUTIC MALARIA

To the Editor:—Will you kindly advise me whether or not, in the treatment of neurosyphilis by malaria, there is any danger of the disease (malaria) being spread by the mosquito?

M.D., Jacksonville, Ill.

ANSWER.—The question as to whether or not in the treatment of neurosyphilis with malaria there is danger of malaria being transmitted to other persons by the mosquito has been the subject of discussion. The following quotations are relevant:

"Care must also be taken that the malaria does not spread from patients to others in their entourage." (Malaria Treatment of General Paralysis, Berlin Letter, THE JOURNAL, March 21, 1925, p. 911.)

"The investigations in the Vienna clinic of Professor Vivaldi (from Rome) and Dr. Kauders, clinic assistants, proved that in this artificial malaria the transmission of the infection by the anopheles mosquito is impossible, owing to the absence of gamete (sexual) forms of the parasites in the blood, or to other reasons—it is not yet exactly understood—but it is a fact. Therefore there is no necessity for strict isolation, as these patients cannot serve as a source of infection." (Amdur, M. K.: Malaria Treatment of Paresis, THE JOURNAL, May 2, 1925, p. 1375.)

"Engel was able to transmit malaria from the ninth human passage by anopheles. The blood of the patient had contained gametes." (Von Engel, R.: Transmission of Therapeutic Malaria by Anopheles, *Deutsche med. Wchnschr.* **51**:1738 [Oct. 16] 1925; abstr. THE JOURNAL, Dec. 5, 1925, p. 1845.)

"Treatment by malaria inoculation is not dangerous for the environment, provided gamete-free malaria are employed." (Berlin Letter, THE JOURNAL, May 29, 1926, p. 1711.)

"It is thus apparent that gametocytes of *Plasmodium vivax* are present in the infections produced by direct transfer of blood much earlier than in the generally accepted time of their appearance in naturally acquired malaria.

"All persons inoculated with the plasmodia of malaria should be mosquito-protected from the time of inoculation to the termination of the infection." (St. John, J. H.: The Early Appearance of Gametocytes in Artificially Induced Tertian Malaria, THE JOURNAL, May 14, 1927, p. 1561.)

SPONTANEOUS HEMORRHAGES UNDER THE SKIN

To the Editor:—Please give the nature and treatment of spontaneous hemorrhages occurring mostly about the knees and thighs in a woman, aged 35. She first notices a stinging pain which is sharply localized, and after a day or so there appears an ecchymotic area perhaps an inch in diameter which disappears like an ordinary contusion; these usually occur singly but recur at intervals of several weeks in new locations. She appears in good general health and has never shown any indications of hemophilia. Please omit name and address.

M.D., Washington.

ANSWER.—The data presented are not sufficient to suggest the origin of the ecchymoses described. Embolic, purpuric or allergic phenomena should be considered. If embolic, a careful examination of the heart would probably disclose physical evidence of endocarditis, which would be the most likely cause, although it is well known that endocarditis may be present with little to be found on examination. If purpuric, a careful examination of the blood should disclose evidence suggestive of this origin; a simple anemia may be the sole finding. If allergic, the history as of urticaria or sensitization to certain proteins, and finally protein sensitization tests should disclose its nature.

Under any circumstances, ecchymoses such as described can only be manifestations of some underlying abnormal process which probably would be disclosed by a careful general examination.

LENS ANTIGEN — LARVEX — PADDOCK

To the Editor:—1. What is the present status of the treatment of senile cataract with lens antigen? 2. What is the substance in Larvex which destroys moth worm? 3. What do you know of "Dr." E. E. Paddock, Box 201, Kansas City, Mo., and his "cure" for gallstones? Please omit my name.

M.D., Georgia.

ANSWER.—1. In 1924 the H. K. Mulford Company requested consideration of "Lens Extract," by the Council on Pharmacy and Chemistry, presenting as evidence for the value of the preparation the reports by A. E. Davis. The Mulford Company was informed that the evidence which it had submitted had been considered by the Council; that the referee to whom the product was assigned had consulted with a number of ophthalmologists, all of whom had agreed that the evidence for its usefulness was not acceptable, and that the Council had postponed the consideration of Lens Extract until more evidence becomes available to demonstrate its therapeutic value.

Since then Dr. Davis has published two further articles, "Serum and Lens-Antigen Extract Treatment for the Prevention and Cure of Cataract" (*Journal of the Christian Medical Association of India* **1**:10 [March] 1926) and "The Lens-Antigen Treatment of Cataract with Consideration of Some Special Features" (*American Medicine* **32**:361 [June] 1926). The Mulford Company has, however, not requested further consideration of its "Lens Extract," and the Council has taken no further action regarding it.

2. Previous to April, 1923, the declaration on the label showed that the product contained arsenic as the active ingredient. In the April 14, 1923, issue of THE JOURNAL an editorial pointed out the dangers of the continued use of such a potent substance as arsenic as a preventive for moth damage, particularly when no warning is given to the final purchaser of the fabrics concerning its presence. Subsequently the information was received that the formula of Larvex had been changed and that the preparation contains "fluorides with certain bitter principles from plants, not alkaloids." Quantitative data were not given nor was the full identity of the ingredients declared.

The Chemical Laboratory of the American Medical Association undertook a quantitative determination of the fluoride content in an original specimen of the Larvex solution in September, 1923. The amount of fluoride present was found to be equivalent to 0.28 per cent of sodium fluoride. Alkaloids were absent. Only a slight trace of arsenic was found. The identity of the plant extractive was not determined.

Whether the composition of Larvex has been changed since September, 1923, we are not in position to state. Furthermore,

we have not seen published data demonstrating the relative efficacy of Larvex as a larvicide.

3. According to available records, E. E. Paddock of Kansas City was born in 1867, obtained a diploma from the Kansas City Medical College in 1895, and was licensed in Missouri the same year. Since that time he has practiced in a number of Missouri towns.

Three or four years ago Paddock seems to have had some connection with a concern calling itself the Lyle Chemical Company, which put out a "Special Prescription for Women," which later seems to have been rechristened "Natura." This purported to be a cure for sterility in the female.

Paddock's principal quackish activity has been as an alleged specialist in gallbladder disease. His follow-up paraphernalia conforms strictly to the orthodox methods of the mail-order quack: the inevitable diagnosis blank, a booklet describing the alleged qualifications of "E. E. Paddock, Specialist in Diseases of the Liver and Gallbladder and Gallstones," and a circular the size of a circus poster reproducing alleged testimonials; finally, of course, the usual sliding scale of prices.

Those who answer his "gallstone cure" advertisements, but fail to send in an order, are circularized later by the Lyle Chemical Company, detailing a home treatment for "painful menstruation." This, at least, was the case about a year ago.

As an advertiser, Paddock has patronized such publications as the *Saturday Blade, Police Gazette, Chicago Ledger, Household Guest* and the Chicago *Herald and Examiner,* which carry a type of advertising that speaks for itself.

CALCIUM LACTATE IN VAGOTONIA

To the Editor:—Regarding vagotonia, sympathicotonia, neurasthenia and other functional nervous disorders, is there any benefit to be expected from calcium lactate given in 30 grain doses in a glass of water every morning on rising? Is there any harm to be feared as a result of prolonged use? I would be grateful for any suggestions regarding the treatment of these conditions.

M.D., Washington.

ANSWER.—All the conditions mentioned, even neurasthenia, are merely syndromes occurring under many and exceedingly dissimilar conditions. Consequently, there can be no one drug or line of treatment that will fit them all. In fact, vagotonia and sympathicotonia are supposed to be rather opposite to each other. A patient presenting any of the syndromes mentioned should receive individual study. Calcium lactate may be of service in a few cases, especially if there is parathyroid deficiency and the blood calcium is low. In the other cases it will do no harm, as the blood probably does not take up any more calcium than it needs. Fortunately metabolism in the human being is regulated by some agency even more intelligent than most physicians.

FELSOL

To the Editor:—Please give me information regarding "Felsol," a preparation made by the American Felsol Company, Lorain, Ohio.

H. E. BATTIN, M.D., New York.

ANSWER.—The following was published in THE JOURNAL (Feb. 14, 1925, p. 536): In the advertising of the American Felsol Company, Felsol is claimed to have the following composition: "Metozin 0.9 (containing Phenazon 0.25, Anilipyrin 0.4, Jodopyrin 0.25), caffein 0.1, digitalis and strophanthus glycosids 0.0015 and the alkaloid of lobelia inflata 0.005."

Felsol is a typical illustration of an irrational shotgun mixture. One of the claimed ingredients, metozin, is stated to contain phenazon (antipyrine), anilipyrin (a mixture of antipyrine and acetanilid) and iodopyrin (a compound of antipyrine and iodine). In addition to these multiple antipyretic ingredients, the product is claimed to contain four other active drugs, namely, caffeine, glucosides (glycosides) of digitalis and strophanthus and the alkaloid of lobelia.

The circular does not state the kind of digitalis glucoside contained in the product, and "lumps" the amount of digitalis and strophanthus glucosides. According to the circular, Felsol "gives the busy physician a handy, convenient and harmless remedy which may be given for any kind of bronchial or cardiac asthma, without the necessity on the part of the physician to embark on long theoretical considerations as to the underlying cause of the attacks." A product that contains preparations of digitalis, strophanthus and lobelia is not a "harmless" remedy. The recommendation for the indiscriminate use of this product is to be strongly condemned.

Current advertising material shows that these statements still hold good. However, a recent circular shows that the firm is increasing the danger of indiscriminate use of this shotgun preparation by exploiting it directly to the public. The circular states: "Originally 'Felsol' was sold only to members of the medical profession and administered by prescription. But the wonderful results . . . led the manufacturer to believe that the greatest good is accomplished by placing 'Felsol' direct in the hands of the public through the legitimate channels of trade." Thus "Felsol" has gone the way of Aspirin, Gude's Pepto-Mangan, Pertussin, and many other onetime "ethical" proprietaries which have been introduced to the public via the medical profession.

Medical Education, Registration and Hospital Service

COMING EXAMINATIONS

ALABAMA: Montgomery, July 12-15. Sec., Dr. S. W. Welch, Montgomery.

CALIFORNIA: San Francisco, June 27-30. Sec., Dr. Charles B. Pinkham, 908 Forum Bldg., Sacramento.

COLORADO: Denver, July 5. Sec., Dr. David A. Strickler, 1011 Republic Bldg., Denver.

CONNECTICUT: Hartford, July 12-13. Sec., Dr. Robert L. Rowley, 79 Elm Street, Hartford.

DELAWARE: Wilmington, June 21-23. State Society and Homeopathic, Pres., Dr. H. W. Briggs, 1026 Jackson St., Wilmington.

DISTRICT OF COLUMBIA: July 12. Sec., Dr. Edgar P. Copeland, Suite 110, 1801 Eye Street, Washington.

FLORIDA: Tampa, June 13-14. Sec., Dr. Wm. M. Rowlett, Box 603, Tampa.

GEORGIA: Atlanta and Augusta, June 8-10. Sec., Dr. J. W. Palmer, Ailey.

HAWAII: Honolulu, July 11-14. Sec., Dr. James A. Morgan, Young Bldg., Honolulu.

ILLINOIS: Chicago, June 28-30. Supt. of Regis., Mr. V. C. Michels, Springfield.

INDIANA: Indianapolis, June 21-23. Sec., Dr. E. M. Shanklin, 421 State House, Indianapolis.

IOWA: Iowa City, June 7-9. Director of Exams. and Licensure, Mr. H. W. Grefe, Des Moines.

KANSAS: Topeka, June 21. Sec., Dr. A. S. Ross, Sabetha.

KENTUCKY: Louisville, June 21-23. Sec., Dr. A. T. McCormack, 532 W. Main Street, Louisville.

LOUISIANA: New Orleans, June 9-11. Sec., Dr. Roy B. Harrison, 1507 Hibernia Bank Bldg., New Orleans.

MAINE: Bangor, July 5-6. Sec., Dr. Adam P. Leighton, Jr., 192 State Street, Portland.

MARYLAND: Regular, Baltimore, June 21-24. Sec., Dr. Henry M. Fitzhugh, 1211 Cathedral St., Baltimore. Homeo. Baltimore, June 14. Sec., Dr. J. S. Garrison, 517 Old Orchard Rd., Ten Hills, Baltimore.

MASSACHUSETTS: Boston, July 12-14. Sec., Dr. Frank M. Vaughan, 144 State House, Boston.

MICHIGAN: Ann Arbor, June 14-16 Detroit, June 20-22. Sec., Dr. Guy L. Connor, 707 Stroh Bldg., Detroit.

MINNESOTA: Minneapolis, June 21-23. Sec., Dr. A. E. Comstock, 636 Lowry Building, St. Paul.

MISSISSIPPI: Jackson, June 21-22. Sec., Dr. Felix J. Underwood, Jackson.

MISSOURI: St. Louis, July 13-15. Sec., Dr. James Stewart, Jefferson City.

NEBRASKA: Omaha, June 7-9. Sec., Mr. Lincoln Frost, State House, Lincoln.

NEW JERSEY: Trenton, June 14-15. Sec., Dr. Charles B. Kelley, 28 West State Street, Trenton.

NEW YORK: Albany, Buffalo, New York and Syracuse, June 27-30. Chief, Professional Examinations, Mr. Herbert J. Hamilton, State Education Bldg., Albany.

NORTH CAROLINA: Raleigh, June 21. Sec., Dr. John W. MacConnell, Davidson.

NORTH DAKOTA: Grand Forks, July 5-8. Sec., Dr. G. M. Williamson, Grand Forks.

OHIO: Columbus, June 7-11. Sec., Dr. H. M. Platter, Hartman Hotel Bldg., Columbus.

OREGON: Portland, July 5-7. Sec., Dr. M. K. Hall, 816 Pittock Block, Portland.

PENNSYLVANIA: Philadelphia and Pittsburgh, July 5-9. Dir. Professional Education Bureau, Mr. C. D. Koch, Harrisburg.

RHODE ISLAND: Providence, July 7. Sec., Dr. B. U. Richards, Providence.

SOUTH CAROLINA: Columbia, June 28. Sec., Dr. A. Earle Boozer, 505 Saluda Ave., Columbia.

SOUTH DAKOTA: Huron, July 19. Dir. Medical Licensure, Dr. H. R. Kenaston, Bonesteel.

TENNESSEE: Memphis, Nashville and Knoxville, June 17-18. Sec., Dr. A. B. DeLoach, 733, Medical Arts Bldg., Memphis.

TEXAS: Austin, June 21-23. Sec., Dr. T. J. Crowe, 918 Mercantile Bank Bldg., Dallas.

VERMONT: Burlington, June 22-24. Sec., Dr. W. Scott Nay, Underhill.

VIRGINIA: Richmond, June 15-18. Sec., Dr. J. W. Preston, Box 444, Richmond.

WASHINGTON: Seattle, July 11. Basic Science Examination, Seattle, July 7-8. Ass't. Director, Mr. George L. Berger, Olympia.

WEST VIRGINIA: Martinsburg, July 26. Commissioner, Dr. W. T. Henshaw, Charleston.

WISCONSIN: Milwaukee, June 28-30. Sec., Dr. Robert E. Flynn, La Crosse. Basic Science Board: Milwaukee, June 27. Sec., Dr. M. F. Guyer, Madison.

WYOMING: Cheyenne, June 1-2. Sec., Dr. G. M. Anderson, Cheyenne.

A COURSE IN PROFESSIONAL CONDUCT

PARK J. WHITE, M.D.

Lecturer on Professional Conduct, and Instructor in Clinical Pediatrics, Washington University School of Medicine

ST. LOUIS

Dr. Bevan's article on "The Need of Teaching Medical Ethics"[1] has recently stimulated interest in this subject. Our elective course in professional conduct at the Washington University School of Medicine was first given four years ago[2] and remains essentially unchanged. It has occurred to us that submitting a brief outline of our course might not be inappropriate at this time. Such a course, obviously, will depend for its interest and value far more on the enthusiasm of the lecturer and on the vividness of his recitals of personal experiences and specific cases than on strict adherence to a barren plan.

For the sake of closer personal touch with the students, the lecturer should be one of the younger practitioners connected with the medical school. It seems neither necessary nor advisable to make the course compulsory.

We shall probably continue to confine the course to the fourth year students, for it is especially at this stage of their education, just before the beginning of the internship, that their social conscience and their appreciation of their fellow physicians' point of view need whatever stimulation can be given.

One point deserves special comment. The public, the bill-paying laymen, view "medical ethics" with a mixture of scorn and suspicion. More than any other factor, the traditional unwillingness of physicians to interfere with other physicians' patients is responsible for this distrust of our "code." Laymen do not want to be balked in their desire to consult any physician they wish, and at any time; and they will not subject themselves to the embarrassment of "properly dismissing" a physician no longer wanted. Of course, in the midst of a certain illness, any change should be made with the full knowledge of all concerned. But, as Dr. Bevan[1] has said, consulting a physician does not give that physician exclusive and permanent right of possession. Certainly our "code" should be changed to allow the patient to seek professional aid where he thinks he can find it best.

The outline of our course is as follows:

LECTURE I

1. GENERAL CONSIDERATIONS.
   - A. Brief discussion of the A. M. A. "Principles of Medical Ethics."
   - B. Plight of the insignificant recent graduate.
   - C. Essential division of the profession into practitioners and investigators.
   - D. Present status of the general practitioner.
   - E. Definition of specialist.
   - F. Profession not really crowded. Urban and country practice.
2. ACQUIRING PRACTICE PROPERLY.
   - A. Honesty. Industry. Correct use of the English language. Medical "salesmanship."
   - B. Laymen's standards of judging a physician in advance.
   - C. "Legitimate" advertising.

LECTURE II

1. ACQUIRING PRACTICE IMPROPERLY.
   - A. "Illegitimate" advertising.
   - B. Undue optimism and "alarmism."
2. GROUP PRACTICE.
3. STARTING AS ASSISTANT TO BUSY PRACTITIONER.
   - A. Advantages and disadvantages.
4. PROPER ATTITUDE OF A DOCTOR TOWARD HIS WORK. (How to *keep* patients.)
   - A. Honesty, industry, precision, punctuality.
   - B. Necessity for keeping written records.
   - C. Readiness to call a consultation.
5. COPING WITH SUCCESS.
   - A. Difficulty of handling a large practice without overwork.
   - B. Limiting practice. Night work, etc.

LECTURE III

1. MEDICAL FINANCE.
   - A. Medical plight of the "genteel" middle classes.
   - B. Determining fair charge for services.
   - C. Coping with patients' "shopping" to learn size of fees for comparison with those of other doctors.
   - D. Difficult collections.
   - E. Patients who should be treated free.
   - F. Fee-splitting and why it is wrong.
   - G. Need of malpractice insurance.
2. RELATION BETWEEN PHYSICIANS AND OTHER PHYSICIANS.
   - A. Functions of medical societies.
   - B. Manner of recommending specialists.
   - C. Consultations.

LECTURE IV

1. ATTENDING PATIENTS OF ANOTHER PHYSICIAN.
   - A. When the other physician is away or sick.
   - B. When the other physician has been dismissed.
2. PUBLIC HEALTH WORK.
3. HOSPITAL STAFF POSITIONS.
4. DOCTOR AND NURSE.
5. DOCTOR AND DRUGGIST.
6. SALARY-POSITIONS.
7. RAILROAD, INSURANCE, FACTORY WORK.

LECTURE V

1. QUACKS AND CULTS.
   - A. Why they exist.
   - B. Damage they do.
   - C. What to do about them.
   - D. "Near-quackish" practices of the medical profession itself, such as unwarranted glandular, electric, intravenous therapy employed for effect.
2. EUGENICS.
3. EUTHANASIA.
4. BIRTH CONTROL.

LECTURE VI

"PROBLEMS OF THE SURGEON."

This lecture is given by Dr. Malvern B. Clopton, assistant professor of clinical surgery.

SUGGESTED READING

- A. Trades and Professions. G. H. Palmer.
- B. Aequanimitas and Other Addresses. William Osler.
- C. Doctor and Patient. S. Weir Mitchell.
- D. The Young Practitioner. O. W. Holmes.
- E. Oath of Hippocrates.
- F. Life of Trudeau.
- G. Life of Pasteur. R. Vallery-Radot.
- H. Microbe Hunters. Paul DeKruif.

1. Bevan, A. D.: The Need of Teaching Medical Ethics, J. A. M. A. **88**: 617 (Feb. 26) 1927.
2. Dean Marriott discussed the course briefly two years ago in his address on Broadening the Medical Curriculum, South. M. J. **18**: 147 (Feb.) 1925.

Vermont February Examination

Dr. W. Scott Nay, secretary of the Vermont Board of Medical Registration, reports the written examination held at Burlington, Feb. 8-10, 1927. The examination covered 12 subjects and included 90 questions. An average of 75 per cent was required to pass. Three candidates were examined, all of whom passed. Two candidates were licensed by reciprocity and one by endorsement of his credentials. The following colleges were represented:

College	PASSED	Year Grad.	Per Cent
Tufts College Medical School		(1926)	86.7
University of Minnesota Medical School		(1926)*	86.4
McGill University Faculty of Medicine		(1925)	90.6

College	LICENSED BY RECIPROCITY	Year Grad.	Reciprocity with
Missouri Medical College, St. Louis		(1900)	Maine
Medico-Chirurgical College of Philadelphia		(1900)	R. Island

College	ENDORSEMENT OF CREDENTIALS	Year Grad.	Endorsement with
Cornell University Medical College		(1922)	N. B. M. Ex.

* This candidate has finished his medical course and received his M.B. degree, and will receive his M.D. degree on completion of a year's internship in a hospital.

Book Notices

DISEASES OF THE HEART: Their Diagnosis, Prognosis, and Treatment by Modern Methods. By Frederick W. Price, M.D., F.R.S., Physician to the National Hospital for Diseases of the Heart. Second edition. Cloth. Price, $6.20. Pp. 534, with 249 illustrations. New York: Oxford University Press, 1927.

In this monograph, the author, a former associate of the late Sir James Mackenzie, first takes up the anatomy, embryology and physiology of the heart. Next he discusses the physical signs, methods of physical examination and the mechanical aids, including the sphygmomanometer, sphygmograph, polygraph, roentgen ray and electrocardiograph, and the apparatus for the graphic record of heart sounds. Then follows an excellent presentation of heart failure, prognosis and treatment in which all the most recent methods are incorporated. The remainder of the book is taken up by a series of chapters on the functional and organic lesions of the heart and on disordered action of the heart. At the end are excellent chapters on roentgen-ray examination, electrocardiography and anesthetics in heart disease. This is distinctly a book written for the general practitioner rather than for the cardiologist. It is not weighted down with ultrascientific discussions of the theoretical and academic phases of the subject but is most practical, and it brings out the importance of functional capacity in both prognosis and treatment. The diagnostic aids that are mentioned particularly are the sphygmomanometer and the sphygmograph or polygraph, all of which are either in the possession of the general practitioner or can be obtained at a relatively low cost and are simple to operate. An electrocardiograph is not considered a sine qua non for adequate cardiac diagnosis or for prognosis or treatment. The consideration of heart failure, its prognosis and treatment before the anatomic lesions, whatever their etiology or the irregularities, appeals particularly as it emphasizes that the functional capacity of the heart, that is, change in function, is more important than change in form. The methods of treatment advocated both in the chapter on treatment and in the discussion of the various pathologic lesions are those accepted by the best modern writers. A learned and sound presentation of a subject that is of great interest to all physicians.

HANDBUCH DER NORMALEN UND PATHOLOGISCHEN PHYSIOLOGIE: Mit Berücksichtigung der experimentellen Pharmakologie. Herausgegeben von A. Bethe, G. v. Bergmann, G. Embden, und A. Ellinger. Band VIII. 1. Hälfte. Energieumsatz. Teil 1. Mechanische Energie. (D/I. Protoplasmabewegung und Muskelphysiologie). Paper. Price, 45 marks. Pp. 654, with 136 illustrations. Berlin: Julius Springer, 1925.

Twenty-three writers contribute to this volume of the comprehensive series constituting the Handbook of Normal and Pathologic Physiology appearing (in seventeen volumes) under the combined editorship of Bethe, Embden, Bergmann and Ellinger. In a review of the first volume that appeared in THE JOURNAL, March 13, 1926, p. 803, the general scope of the enterprise was outlined. The present volume deals exhaustively with the various types of movements and contractility observed in plants and animals. The first 107 pages deal essentially with protoplasmic movements, ciliary motion, growth movements in plants, and contractile organs of plants. The remainder of the book describes all possible phases of muscle physiology (histology, physical chemistry, mechanical properties, tonus, contracture and rigor, influence of inorganic ions on muscular activity, chemistry of muscular contraction, respiration of muscle, thermodynamics of muscle, and theory of muscular contraction). One chapter is devoted to the pharmacology of muscular contraction. The last three chapters deal with muscular degeneration, atrophy and hypertrophy, electrodiagnosis and electrotherapy of muscle, and the general physiology underlying the action of muscles in the body. This outline of contents serves to indicate to the interested reader the exhaustive nature of the volume as a whole without a recital of the headings of all the chapters. Among the chief contributors appear the familiar names of Meyerhof and Embden. A. V. Hill's name is absent, though he and Meyerhof have established an international reputation because of their fundamental contributions to this field of physiology. Enough has been said to indicate that the volume contributes the last word on this aspect of physiology for the interested reader and researcher as a compilation of information and bibliographic references to the original literature.

TEXTBOOK OF BIOLOGICAL CHEMISTRY. By James B. Sumner, Ph.D., Assistant Professor of Biological Chemistry, Cornell University. Cloth. Price, $3.50. Pp. 283. New York: Macmillan Company, 1927.

This is intended for the elementary student and not as a reference work. An introduction dealing with the general character of the field covered, the methods employed, the problems encountered and the type of original publications available is followed by eleven chapters dealing with (1) the chemistry of the lipins, their digestion and metabolism; (2) the carbohydrates, similarly treated; (3) acidosis and alkalosis, treated briefly; (4) the chemistry of the proteins, their digestion, absorption and metabolism; (5) the vitamins; (6) energy requirements; (7) the composition of the urine, with the origin and significance of the constituents; (8) blood and its function in respiration, treated in a simple manner from the modern point of view; (9) physiologic detoxications, briefly considered; (10) enzymes, treated separately in a chapter with more particular reference to the author's beautiful work on urease; (11) the physical chemistry of protoplasm, treated simply, with many applications of the fundamental concepts to biology. References are not given to original papers, and few attempts are made to discuss problems critically. The work is one that is to be recommended to the college grade of students as a beginning text. It is of some significance, and of considerable satisfaction, that the author has not adopted the recently suggested changes in biochemical terminology.

THE TREATMENT OF CHRONIC ARTHRITIS AND RHEUMATISM. By H. Warren Crowe, D.M., B.Ch., M.R.C.S. Cloth. Price, $2.75. Pp. 196, with 16 illustrations. New York: Oxford University Press, 1926.

This is a dissertation on a method of treatment of "rheumatoid arthritis," "osteo-arthritis," and "mixed arthritis" by one who is convinced that nearly all patients with these diseases can be cured by treatment with an autogenous or stock vaccine composed of streptococci and the micrococcus deformans described by the author in 1912, provided his methods of administration are followed exactly. In some cases he finds it necessary first to desensitize the patient with peptone or by mixing the vaccine with benzamine lactate. Removal of foci of infection is advocated. The theoretical basis for his treatment, together with experimental evidence, is to be given in a companion volume to be published shortly. The case records cited in this volume are not especially convincing.

DIE PSYCHOPATHISCHEN VERBRECHER: Die Grenzzustände zwischen geistiger Gesundheit und Krankheit in ihren Beziehungen zu Verbrechen und Strafwesen. Für Ärzte und Juristen. Von Dr. Karl Birnbaum, Oberarzt an der Berliner Städtischen Irrenanstalt Herzberge. Second edition. Paper. Price, 17.50 marks. Pp. 287. Leipsic: Georg Thieme, 1926.

It is encouraging to note that a book dealing with this topic should have had demand enough to make a second edition necessary. The entire question of classification of the psychopathic criminal has undergone considerable reconsideration during the last ten years. In spite of the importance of the psychanalytic point of view, the student of the psychopathic criminal cannot fail to observe recurrent manifestations that refuse to be fitted into the purely situational or acquired mechanisms. Birnbaum presents a varied treatment of the entire field, being less concerned with the elaborate development of theory (although theoretical foundations are by no means ignored) than with the discussion of various manifestations on the basis of actual case material.

The first three lectures develop the theory and define the diagnostic criteria, the general classification and the general definition of the types. The following chapters are devoted to the various types of psychopathic criminal. Lectures 21 to 24 deal with the reaction of psychopathic patients to various legal procedures such as imprisonment, including a discussion of the results obtained by imprisonment and other

judicial treatment. Chapter 24 is devoted to the simulation in psychopaths, and the remaining chapters deal with the forensic implications of the subject. The work is written entirely from the psychiatric point of view and is in the main an extension of the ideas of the older psychiatry, of which the chapter in Kraepelin's "Psychiatry," eighth edition, on psychopathic personalities, is the model.

The definition of the psychopathic personality and borderline psychopath was always a troublesome one. The definition given by the author may be freely translated about as follows: Into the group of the constitutional psychopathic he places "those pathologic manifestations which are characterized by mild psychic deviations from the normal, based on an abnormal constitution." In addition to this definition he discusses the definition of degeneration, which, he points out, is still a very vague and untested concept. He recognizes that degeneration is an empiric biologic or, rather biopathologic manifestation and is to be recognized by the fact that it is "a form of organization which varies from the normal by the characteristic of being an hereditary deviation from the normal in the direction of the unfavorable so far as the organism is concerned." The author points out, furthermore, that because of the indefiniteness of this concept there is considerable lack of unanimity in the interpretation of these terms among anthropologists, sociologists and historians, and among the more purely natural scientists from the biologist to the psychiatrist.

A book written from this point of view may leave much to be desired with regard to a great many of the subjects treated. The modern conception of the adaptive mechanism and its disorders together with the emphasis placed in this country on the social and educational factors would, perhaps, question some of the inferences drawn by the author in his discussion of his cases as well as in his general treatment. But even granting this, the attempt made by the author to assemble all the information and to assemble the knowledge in regard to constitutional and hereditary factors, without omitting the discussion of psychogenetic characteristics, is a valuable addition to the literature. With the opinion in this country swinging rather extremely toward the psychogenetic and situational explanations, it is perhaps useful for the purposes of orientation to find that there is so much to be said on the constitutional and pathologic side. The forensic treatment of problems is on a par with the general excellence of the book, and much of it is applicable to this country. Some of it, of course, will be found to be more useful in connection with German procedure than with ours.

CLINICAL PREVENTIVE DENTISTRY. Based on a New Type of X-Ray Examination. By Howard Riley Raper, D.D.S., F.A.C.D. Cloth. Price, $3.50. Pp. 124, with 44 illustrations. Rochester, N. Y.: Ritter Dental Manufacturing Company, Inc., 1926.

The author of this book does not believe in "100 per cent extraction of pulpless teeth" but in striving for 100 per cent prevention of pulpless teeth. He shows that one of the obstacles in the way of attaining this object is the difficulty of detecting interproximal cavities. Constructively, he explains a simple roentgenologic method for demonstrating these cavities at reasonable cost. The book has a good purpose and contains detailed information. Its style is discursive and its structure fragmentary.

LARYNGEAL TUBERCULOSIS. By Frank Robert Spencer, A.B., M.D., F.A.C.S., Assistant Professor of Otolaryngology, Department of Medicine and Surgery, University of Colorado. With a Chapter on Gross Postmortem and Microscopic Pathology. By Philip Hillkowitz, B.S., M.D., Director of Clinical Laboratories of Mercy Hospital. Cloth. Price, $5. Pp. 69, with 57 illustrations. Philadelphia: J. B. Lippincott Company, 1927.

This book deals with the laryngeal involvement that is a common complication of pulmonary tuberculosis. After noting the historical aspect of the condition as it occurs in literature, the author discusses the fact that tuberculosis of the larynx is practically always secondary to tuberculosis of the lungs. True, some one occasionally describes cases of supposed primary tuberculosis of the larynx, but they are so rare as to be practically nonexistent. The prophylaxis is then considered and the author states that "it is almost if not quite impossible to prevent laryngeal tuberculosis in the majority of patients suffering with advanced pulmonary tuberculosis." The various changes, such as asthenia, hyperemia, infiltration, tuberculoma, ulceration, edema and perichondritis, are considered, and many beautiful and highly instructive illustrations accompany the text and practically show the tissues as they were found. The whole work is nicely done, and the pictures are of great value to the reader and to the student. Spencer discusses the prognosis of the disease and outlines the various measures of actual treatment. Among these are vocal rest, lactic acid on the ulcerations, the general administration of tuberculin, use of heliotherapy, and cauterization. This brochure is most complete in every way and its study is recommended to all who are interested in internal medicine and in laryngology. It is the work of one who has had extensive experience in tuberculosis and who has excellent medical judgment.

ANATOMIE TOPOGRAPHIQUE DU SYSTÈME NERVEUX CENTRAL. Par Georges Guillain, professeur de clinique des maladies du système nerveux à la Faculté de médecine de Paris, et Ivan Bertrand, chef du laboratoire d'anatomie pathologique de la clinique des maladies du système nerveux à la Faculté de médecine de Paris. Cloth. Price, 95 francs. Pp. 322, with 60 illustrations. Paris: Masson & Cie, 1926.

This is a very complete volume which consists of sixty original plates illustrating the microscopic and gross topography of the central nervous system. Clear and concise anatomic descriptions furnish the text. The work is of course illustrative of the combination of clinical and anatomicopathologic methods of investigation that have been employed by French neurologists.

Books Received

Books received are acknowledged in this column, and such acknowledgment must be regarded as a sufficient return for the courtesy of the sender. Selections will be made for more extensive review in the interests of our readers and as space permits. Books listed in this department are not available for lending. Any information concerning them will be supplied on request.

ULTRA-VIOLET RADIATION AND ACTINOTHERAPY. By Eleanor H. Russell, M.D., B.S., and W. Kerr Russell, M.D., B.S., Hon. Actinotherapist Sun-Ray Clinic, Newcastle-on-Tyne. With forewords by Sir Oliver Lodge, F.R.S., D.Sc., LL.D., and Sydney Walton, C.B.E., M.A., B. Litt. Second edition. Cloth. Price, $5. Pp. 429, with 168 illustrations. New York: William Wood & Company, 1927.

New edition of well prepared British handbook on uses of ultraviolet rays.

INDIKATIONEN FÜR DIE OPERATIVE BEHANDLUNG DER FRAUENKRANKHEITEN. Von Dr. Walther Benthin, a. ö. Professor an der Albertus-Universität und leitender Arzt der Abteilung für Geburtshilfe und Frauenkrankheiten des städtischen Krankenhauses zu Königsberg i. Pr. Paper. Price, 10.20 marks. Pp. 226. Berlin: Urban & Schwarzenberg, 1927.

A guide to surgical indications in gynecology with sixty-one case reports.

GYNECOLOGICAL DIAGNOSIS AND PATHOLOGY. By A. H. F. Barbour, M.D., LL.D., F.R.C.P., and B. P. Watson, M.D., F.R.C.S., F.A.C.S., Professor of Obstetrics and Gynecology in Columbia University. Third edition. Cloth. Price, $4. Pp. 223, with 209 illustrations. New York: William Wood & Company, 1927.

New edition of guide to gynecology in small type but with good illustrations.

DIE ABTREIBUNG. Eine medizinisch-soziologische Studie in bildlichen Darstellungen für Ärzte, Juristen und Soziologen. Von Universitäts-Professor Dr. W. Liepmann, Direktor des Deutschen Instituts für Frauenkunde. Paper. Price, 12 marks. Pp. 24, with 24 plates. Berlin: Urban & Schwarzenberg, 1927.

Beautifully illustrated monograph showing high mortality from abortion.

ANATOMIE ÉLÉMÉNTAIRE DES CENTRES NERVEUX ET DU SYMPATHIQUE CHEZ L'HOMME. Vie de relation et vie végétative. Par P. Gilis, professeur d'anatomie à la Faculté de médecine de Montpellier. Paper. Price, 20 francs. Pp. 232, with 36 illustrations. Paris: Masson & Cie, 1927.

On the relations of the various parts of the various nervous systems.

DIE ARZNEIMITTEL-SYNTHESE AUF GRUNDLAGE DER BEZIEHUNGEN ZWISCHEN CHEMISCHEN AUFBAU UND WIRKUNG FÜR ÄRZTE, CHEMIKER UND PHARMAZEUTEN. Von Dr. Sigmund Fränkel, a. ö. Professor für medizinische Chemie an der Wiener Universität. Sixth edition. Paper. Price, 87 marks. Pp. 935. Berlin: Julius Springer, 1927.

Latest edition of established German work on chemistry of drugs.

ALKOHOL-EXTRAKT-REAKTION. A-E-R zum Nachweis von Schwangerschaft, Karzinom, Geschlecht des Kindes, usw. Von Dr. med. W. Lüttge, und Dr. phil. W. v. Mertz, Assistenten an der Univ.-Frauenklinik Leipzig. Paper. Price, 13 marks. Pp. 259, with 22 illustrations. Leipsic: S. Hirzel, 1927.

Monograph on a new diagnostic reaction that is frequently right.

THE ELEMENTS OF GENERAL ZOOLOGY. A Guide to the Study of Animal Biology Correlating Function and Structure with Notes on Practical Exercises. By William J. Dakin, D.Sc., F.Z.S., Professor of Zoology in the University of Liverpool. Cloth. Price, 12s. 6d. net. Pp. 496, with 252 illustrations. New York: Oxford University Press, 1927.

New English textbook of biology.

SURGICAL NURSING AND THE PRINCIPLES OF SURGERY FOR NURSES. By Russell Howard, C.B.E., M.S., F.R.C.S., Surgeon, London Hospital. Fifth edition. Cloth. Price, $3. Pp. 320, with illustrations. New York: Longmans, Green & Company, 1926.

New edition of well established British textbook with more emphasis on technic than on principles.

THE TEETH AND HEALTH. By J. Sim Wallace, D.Sc., M.D., L.D.S., Lecturer on Preventive Dentistry, King's College Hospital. Cloth. Price, 3/6 net. Pp. 214, with 5 illustrations. London: Faber & Gwyer, Ltd., 1926.

Elements of preventive dentistry but somewhat too technically presented for a lay audience.

DIE CROON-VORLESUNGEN ÜBER AUFBAU UND ABBAU DES NERVENSYSTEMS. (Croonian Lectures on the Evolution and Dissolution of the Nervous System.) Von J. Hughlings Jackson. Uebersetzt von Otto Sittig. Paper. Price, 6.60 marks. Pp. 137. Berlin: S. Karger, 1927.

Jackson's famous lecture with English on one page and German translation on page opposite.

HERNIA AND HERNIOPLASTY. By Ernest M. Cowell, D.S.O., M.D., B.S., Surgeon, Croydon General Hospital. With an introduction by Sir Arthur Keith, F.R.C.S., F.R.S. Cloth. Price, 9/-net. Pp. 128, with 72 illustrations. London: H. K. Lewis & Company, Ltd., 1927.

Attempt at monographic presentation of best features of some hundred technics for hernia.

THE REACTION OF CULTURE MEDIA. By S. R. Douglas, J. W. H. Eyre, P. P. Laidlaw, and C. G. L. Wolf. Medical Research Council. Special Report Series No. 35 (revised). Paper. Price, 6d. net. Pp. 21. London: His Majesty's Stationery Office, 1927.

Studies on importance of reaction in relation to bacterial growth and identification.

THE CLINICAL INTERPRETATION OF BLOOD CHEMISTRY. By Robert A. Kilduffe, A.B., A.M., M.D., Director Laboratories, Atlantic City Hospital. Cloth. Price, $2.50. Pp. 186, with 20 illustrations. Philadelphia: Lea & Febiger, 1927.

Advice for practitioners on readings and interpretations in blood chemistry.

WIE KANN DIE MENSCHHEIT VON DER GEISSEL DER SYPHILIS BEFREIT WERDEN. Von Erich Hoffmann, o. ö. Professor und Direktor der Hautklinik an der Universität Bonn. Paper. Pp. 54, with 8 illustrations. Berlin: Julius Springer, 1927.

Consideration of the possibilities of healing and eradicating syphilis.

THOUGHT AND THE BRAIN. By Henri Piéron, Professor at the College of France. Translated by C. K. Ogden, Editor of "Psyche." Cloth. Price, $4. Pp. 262, with 20 illustrations. New York: Harcourt, Brace & Company, Inc., 1927.

Complex presentation of modern intricate theories of action of the mind.

BASIC MATERIAL FOR A PHARMACEUTICAL CURRICULUM. By W. W. Charters, University of Pittsburgh, A. B. Lemon, University of Buffalo, and Leon M. Monell, University of Buffalo. Cloth. Price, $4. Pp. 366. New York: McGraw-Hill Book Company, Inc., 1927.

Guide to the study of pharmacy prepared by an unprejudiced committee.

DIE NACH INNER GERICHTETE SCHUTZ- UND HEILWIRKUNG DER HAUT (ESOPHYLAXIE) MIT BESONDERER BERÜCKSICHTIGUNG DER TUBERKULOSE. Von Dr. med. Erich Hoffmann, o. ö. Professor und Direktor der Hautklinik an der Universität Bonn. Paper. Price, 1.35 marks. Pp. 32. Berlin: S. Karger, 1927.

Function of the skin in healing processes.

ULCUSPROBLEM UND SÄUREBASENGLEICHGEWICHT. EINE KLINISCH-EXPERIMENTELLE STUDIE. Von Prof. Dr. Rudolf Bálint, o. ö. Universitäts-Professor, Direktor der I. med. Klinik der Pázmány-Peter-Universität in Budapest. Paper. Price, 10.40 marks. Pp. 204, with 18 illustrations. Berlin: S. Karger, 1927.

Monographic German consideration of gastric ulcer.

PHYSICIANS OF THE MAYO CLINIC AND MAYO FOUNDATION. Cloth. Price, $7. Pp. 578, with portraits. Philadelphia: W. B. Saunders Company, 1927.

Biographies, bibliographies and photographs of some hundreds of physicians associated for more than a year with the Mayo Clinic.

MEDICAL SCIENCE FOR EVERYDAY USE. By Shields Warren, A.B., M.D., Instructor in Pathology in the Harvard Medical School. Cloth. Price, $2. Pp. 178. Philadelphia: Lea & Febiger, 1927.

Collection of articles previously published in the Boston *Herald*.

A TEXT-BOOK OF CLINICAL NEUROLOGY. By Israel S. Wechsler, M.D., Assistant Professor of Clinical Neurology, Columbia University. Cloth. Price, $7. Pp. 725, with 127 illustrations. Philadelphia: W. B. Saunders Company, 1927.

Neurology with emphasis on signs, symptoms and pathology.

SURGICAL APPLIED ANATOMY. By Sir Frederick Treves. Eighth edition, revised by C. C. Choyce, C.M.G., C.B.E., B.Sc., Professor of Surgery, University of London. Cloth. Price, $4. Pp. 727, with 163 illustrations. Philadelphia: Lea & Febiger, 1927.

Latest edition of classic guide for students.

BASAL METABOLISM IN HEALTH AND DISEASE. By Eugene F. Du Bois, M.D., Medical Director, Russell Sage Institute of Pathology. Second edition. Cloth. Price, $5. Pp. 431, with 92 illustrations. Philadelphia: Lea & Febiger, 1927.

New edition of a standard guide.

HEALTH RECORD FOR CHILDREN. By J. Theron Hunter, M.D. Cloth. Price, $1. Pp. 52. Baltimore: Williams & Wilkins Company, 1927.

Blank forms for recording the health record of the child.

DIE CHIRURGIE. Eine zusammenfassende Darstellung der allgemeinen und der speziellen Chirurgie. Herausgegeben von Prof. Dr. M. Kirschner, und Prof. Dr. O. Nordmann. Lieferung 14. Band VI. Die Chirurgie der Harnblase. Die Chirurgie der Prostata und der Samenblasen. Von Prof. Dr. E. Wehner. Paper. Price, 18 marks. Pp. 751-1038, with 113 illustrations. Berlin: Urban & Schwarzenberg, 1927.

HANDBUCH DER INNEREN SEKRETION. Eine umfassende Darstellung der Anatomie, Physiologie und Pathologie der endokrinen Drüsen. Herausgegeben von Dr. Max Hirsch. Band I, Lieferung 2, & Band II, Lieferung 2. Paper. Price, 13.50 and 12 marks. Pp. 197-336, and 277-422, with illustrations. Leipsic: Curt Kabitzsch, 1927.

GENERAL HINTS ON EVERYDAY HEALTH. By Morris Fishbein, M.D., Editor of the Journal American Medical Association and Hygeia. Little Blue Book No. 167. Paper. Price, 5 cents. Pp. 64. Girard, Kansas: Haldeman-Julius Company, 1927.

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THE FACTS ABOUT REJUVENATION. By Morris Fishbein, M.D. Little Blue Book No. 648. Paper. Price, 5 cents. Pp. 32. Girard, Kansas: Haldeman-Julius Company, 1926.

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ANNUAL REPORT OF THE SANITARY ENGINEER OF THE REPUBLIC OF HAITI FOR THE FISCAL YEAR 1925-1926. Paper. Pp. 189, with illustrations. Port au Prince, 1926.

BIENNIAL REPORT OF THE STATE BOARD OF HEALTH OF THE STATE OF NEVADA FOR THE PERIOD ENDING DECEMBER 31, 1926. Paper. Pp. 15. Carson City, 1926.

FORTY-SECOND ANNUAL REPORT OF THE TRUDEAU SANATORIUM. Paper. Pp. 51, with illustrations. Saranac Lake, 1926.

Miscellany

RÔLE OF ACHLORHYDRIA AND INTESTINAL INFECTION IN PERNICIOUS ANEMIA

Thirty-seven cases of pernicious anemia have been examined by F. A. Knott (*Guy's Hosp. Rep.* **77**: 1 [Jan.] 1927. Each of the patients gave definitely positive signs: The blood picture showed anemia with high color index, megalocytosis, anisocytosis, often nucleated red cells and leukopenia. The serum gave a negative direct and positive indirect van den Bergh reaction. All had complete achlorhydria. Many showed signs of subacute combined degeneration of the spinal cord, the symptoms of which were, in several instances, more prominent than those of the associated anemia. The bacteriology of the duodenal specimens together with that of the feces has been worked out in great detail. In normal fasting people the upper part of the small intestine is sterile or contains very small numbers of nonpathogenic micrococci and sarcinae. Not until the middle part of the small intestine is reached do milk-souring gram-positive bacilli (e. g., *B. acidophilus* type) become numerous, and the gram-negative coliform organisms are not fully established above the lower parts of the jejunum. The gram-positive obligate anaerobes (*B. enteritidis-sporogenes, B. welchii*) also are numerous only in the lower jejunum. In cases of complete achlorhydria the bacterial contents of the duodenum and ileum have a tendency to be fecal in type.

The theory that this ascending infection is the direct result of the achlorhydria is supported by several experimental observations. In the thirty-seven cases on which this note is based, coliform bacilli were found in 94 per cent, streptococci in 97 per cent, and staphylococci in only 44 per cent. Hemolytic coliform bacilli are not at all uncommon, hemolytic micrococci occur frequently, and the hemolytic anaerobes, as far as the duodenum is concerned, are evidently rare. The gram-positive anaerobes are relatively increased. The most striking increase shown in the table is that of *B. coli-hemolyticus*. From these various results one may fairly assume the relatively frequent occurrence of hemolytic bacteria of various kinds in the intestine in cases of Addison's anemia.

From experimental work already published, it seems that (1) hemolysins may be absorbed from the intestine, and (2) that they may produce in vivo an anemia of addisonian type. In animals an anemia definitely of addisonian type has been produced by injections of a great variety of hemolytic substances. Any active hemolysins gaining access to the circulating blood tend sooner or later to produce a blood picture approximating more or less closely to that of the disease under consideration. Particularly is it noteworthy that similar blood pictures are produced by the hemolysins of the micrococci, the coliform bacilli and the anaerobes. In his experimental work Knott failed to find much evidence that production of the special addisonian type of anemia is peculiar to any one bacterial group.

It seems quite possible that the hemolysin responsible for Addison's anemia is not specific, except that it may be one which also possesses neurotoxic properties. But as to this last point, the possibility is to be considered that the neurotoxin may not necessarily be derived from the same bacterial strain, but may arise from another organism, say one of the gram-positive anaerobic group, which bacteria are evidently also present in large numbers in the gross fecal infection of the small intestine in these cases. The data given suggest that in Addition's anemia and subacute combined degeneration of the cord there is a double invasion of the small intestine: from above by catarrhal and pyogenic organisms, and from below by fecal and putrefactive bacteria. In one or both groups hemolytic bacteria may occur, and it is noteworthy that if both routes are considered, the incidence of hemolytic strains is about 90 per cent. In the few cases in which anemia of the addisonian type follows chronic ileac obstruction the ascending infection alone would occur, the gastric germicidal barrier being intact. But whether the initial cause is achlorhydria or obstruction, the ultimate result is gross fecal infection of the jejunum and ileum. If absorption of hemolysin can occur from the small intestine, the point at which supporters of the absorption theory will disagree concerns the exact nature of the organism responsible for the hemolysin and neurotoxin production.

Is it necessary, however, to postulate a single specific bacterial strain? There is, of course, the possibility that the achlorhydria, by permitting large numbers of living organisms derived from septic material to pass through the stomach into the duodenum may promote a catarrhal state of the mucosa of the small intestine, which facilitates not only its infection with all kinds of fecal bacteria but also absorption of whatever toxins these organisms may produce. Knott puts forward the suggestion that the reason for complete failure on the part of so many workers to isolate a special bacterium in Addison's anemia arises from the fact that there is no specific organism, the toxins being products of the grossly fecal flora, which comes to occupy the small intestine and in which one may find varying mixtures of hemolytic and neurotoxic strains. Whether the organisms are specific or not, there is at least no doubt that striking improvement may follow the oral administration of dilute hydrochloric acid, three or four times daily. Knott suggests that acid given in this way must act not only as a prophylactic preventing reinfection of the intestines from above, but must also tend to reinstate the waves of acidity, which normally pass through the small intestine, driving back the fecal flora of the cecum and lower ileum. By whichever route, ascending or descending, toxic bacteria were invading the upper small intestine, continued administration of hydrochloric acid would tend to reduce the numbers actually establishing themselves at that level. In this way might be explained the evident therapeutic value of continued oral administration of dilute hydrochloric acid in cases of Addison's anemia and subacute combined degeneration of the cord.

Medicolegal

Judicial Observation Versus Niceties of Alienists

(Commonwealth v. Devereaux (Mass.), 153 N. E. R. 881)

The Supreme Judicial Court of Massachusetts, in affirming a denial of a motion for a new trial after the conviction of the defendant of murder, says that it was stated in the motion that evidence had been newly discovered to the effect in substance that the defendant was insane and "absolutely irresponsible and not appreciative of the significance between right and wrong." No evidence as to the mental condition of this defendant was offered at the trial before the jury. The judge who denied the motion presided over the jury trial, saw the defendant, heard him testify in his own behalf, and, of course, watched his apparent mental capacity as revealed both under direct and cross examination and by his other conduct in the courtroom during the trial. The judge may well have been able to form a judgment as to the legal responsibility of the defendant for crime, based on common sense inferences and intelligent observation, more reliable as a practical guide to the accomplishment of justice than the refined distinctions and technical niceties of alienists and experts in psychopathic inferiority. He may have found that the affidavits supporting the motion were not reliable. Such a conclusion would have been within the judicial discretion of the trial court. Again, a Massachusetts statute in force at the time provided that any person indicted for a capital offense should be examined by the department of mental diseases of the commonwealth with a view to determining his mental condition and the existence of any mental disease or defect that would affect his criminal responsibility, and file a report of its investigation with the clerk of the court in which the trial was to be held. It was a necessary deduction from all the circumstances that the defendant was put on trial on the indictment because the report of the department of mental diseases upheld his criminal responsibility. The judge had a right to examine the cause suggested in the motion for a new trial in the light of the contents of that report in order to aid him in ascertaining whether justice

required that there be a new trial. Constitutional or other inferiority is not the test of criminal responsibility. Nor was the fact that the question of insanity was not raised at the trial any reason in and of itself for granting a new trial merely because affidavits were presented having a tendency to show insanity. Otherwise the strategy of almost every defense would be to omit any reference to insanity on the first trial and reserve that for a second trial. When such a motion is presented, it becomes the duty of the trial judge to determine whether there is sound ground for such a defense and whether it would or ought to produce a different result in the minds of another intelligent jury; and this is a matter for the trial court to judge for itself in the exercise of a sound discretion.

Opinion Evidence of Probable Duration of Injuries

(Barron v. Duke et al. (Ore.), 250 Pac. R. 628)

The Supreme Court of Oregon, in affirming a judgment for $8,964 damages for personal injuries sustained by Mrs. Barron in a collision of automobiles, says that she was thrown through the glass door of the car in which she was riding and struck the sidewalk on her head. The testimony of the physician who attended her indicated that her brain trouble could not be localized; that the usual "likely" and "probable" result of her injury would be epilepsy, or some other serious or permanent injury. A plaintiff is entitled to prove any injury to his or her person and all damages that usually or ordinarily result from the wrongful act alleged or from the nature and kind of injuries described. It is the fact of injury that is elemental, not the nature or character of the particular wounds and hurts which necessarily and naturally result from the negligent act. Future consequences which are reasonably to be expected to follow an injury may be given in evidence for the purpose of enhancing the damages. Such apprehended consequences must be such as, in the ordinary course of nature, are reasonably certain to ensue, in order that they may be considered by the jury. Opinion evidence is properly receivable as to the probable effects or duration of an existing condition of an injury, while evidence of future consequences from a personal injury which are not present at the time, but are contingent, speculative and merely possible, is not admissible. The opinions of physicians may be admitted to show the probable future consequences of an injury, when the consequences anticipated are such as, in the ordinary course of events, may be expected to happen, and not merely speculative or possible. The injury to Mrs. Barron's head being subjective, it was proper for the attending physician to explain to the jury the probable results by comparing the general results to other persons who had suffered similar injuries. His evidence should not be withdrawn from the jury because he said he did not know what the future results would be.

Concealing Negligence Malpractice—Not Equity Case

(Tulloch v. Haselo (N. Y.), 218 N. Y. Supp. 139)

The Supreme Court of New York, appellate division, third department, in affirming an order and judgment for the defendant, dismissing the plaintiff's complaint on the defendant's motion for judgment on the pleadings, says that the complaint alleged that in January, 1921, through the defendant's carelessness and negligence while he was extracting teeth for the plaintiff when she was under ether, one of the teeth went down her throat and lodged in her lung; that he concealed from her the fact that a tooth had gone down her throat; and that she did not know of the existence of the tooth in her body until it was removed from her lung in January, 1924. The defendant set up as separate defense the two-year statute of limitations applicable to an action to recover damages for malpractice.

There was nothing alleged from which it might be inferred that the defendant knew or ought to have known that the tooth had lodged in the lung. In the absence of symptoms, brought to his attention, indicating a possible lodgment in the lung, he might have assumed that the tooth had entered the stomach and had safely passed out of the body through the intestine. The allegation of fraudulent concealment in the complaint referred simply to the concealment of the fact that the defendant "let a tooth fall down her throat, and that a tooth had gone down her throat." There was nothing alleged from which the court might infer any intentional fraudulent misrepresentation of fact as to the presence of a tooth in the lung, resulting from letting it fall down her throat. At most there was a breach of professional duty in the operation alleged to have been negligently performed, and in the concealment of the negligent act. That was malpractice, and the statute of limitations had run against such a cause of action.

The plaintiff contended, however, that the cause of action alleged was a cause of action for fraud, and that the statute of limitations for such an action does not begin to run until the discovery of the fraud, which discovery in this case was made in January, 1924. But the direct cause of the plaintiff's damage was the carelessness and negligence in permitting the tooth to fall down the plaintiff's throat. The subsequent concealment of such negligent act may have aggravated the original wrong, but simply as a circumstance in the chain of events leading from the original carelessness, presumably adding to the damages which resulted therefrom. The concealment alleged was not the wrong which must be made the gravamen of an action to procure a judgment on the ground of fraud. It was malpractice that was the proximate cause of the injury which the plaintiff sustained. The failure to speak and to disclose the negligent act was a breach of duty which constituted malpractice.

The plaintiff sought further, however, to invoke the doctrine of equitable estoppel to prevent the defendant from raising the statute of limitations, contending that an action may be brought in equity where one has obtained such an advantage by fraud as equity will not allow him to hold. But no case was cited in which equity has taken jurisdiction in an action for personal injuries, and there were no facts alleged which should invite the court to stretch its chancery powers to a case which was clearly malpractice and not fraud. It would be a dangerous precedent to establish to hold that equity should interpose against the statute of limitations in a malpractice case, especially where no intentional injury is shown or to be inferred, amounting to fraud and deceit; and for such a case the outlawry statute has made provision.

Requiring New Certificate to Excuse from Vaccination

(Barber v. School Board of Rochester et al. (N. H.), 135 Atl. R. 159)

The Supreme Court of New Hampshire says that this was a bill in equity brought by the plaintiff in behalf of his minor children and in his own right. The allegations were that in 1924 the children, being of school age, were excused from being vaccinated, on furnishing a proper certificate. In 1925 the school board demanded a new certificate, which the plaintiff refused to furnish. The defendants' answer alleged that the children were fit subjects for vaccination and declared the purpose to exclude them from the public schools of Rochester until they were vaccinated or furnished a new certificate. A demurrer to the answer was overruled, and the plaintiff excepted, whereupon the case was transferred to this court, which overrules the plaintiff's exceptions.

The present rights and duties of the parties must be determined by section 1, chapter 123, of the public laws of the state, which provides that no child shall attend a public or private school in the state unless he has been vaccinated, or holds a certificate of the local board of health that he is unfit for vaccination. The local board of health shall issue such a certificate on the advice of a registered physician approved by it. The statute is constitutional.

The constitutionality of vaccination statutes has been passed on in many cases, and the uniform conclusion has been that they constitute a valid exercise of the police power of the state. In some instances the act was compulsory in terms. In others, the compulsion was indirect or partial, as it is here. Under the New Hampshire statute, the child may not attend school unless vaccinated or properly excused from vaccination, while, by other provisions, the parent or custodian of the child is liable to certain penalties for failing to

cause the child to attend. According to all the cases cited, these statutes are valid. The supposed conflict of authority, referred to in *People* v. *Lansing Board of Education*, 224 Mich. 388, 195 N. W. 95, relates only to questions conferring powers on boards and officers. From the general proposition that there is legislative power to enact a compulsory vaccination law, there has not been dissent by any court of last resort.

In the instant case a proper certificate was furnished in 1924. The demand for a new certificate in 1925 precipitated the present controversy. The statute is silent as to how often a certificate may be required. It was the legislative intent to provide efficient protection, and the statute is to be construed accordingly. Conditions making it improper to vaccinate the child at one time might not exist at a later date. Assuming that the physical conditions might be such as to show that the child never would be a proper subject for vaccination, and also assuming that, in such a case, no more than one certificate could be required, the point of the present controversy was not reached. There was nothing to show the existence of such conditions here. The plaintiff rested his case on the proposition that, in all cases, one certificate is sufficient for all time. This construction cannot be adopted. The meaning of the statute is that a new certificate may be required whenever there is reasonable ground to believe that there may have been such a change of conditions that the child is no longer "an unfit subject for vaccination."

Nor could the contention that the burden was on the defendants to justify their action be sustained. This was, in substance, a petition to review the action of a board whose findings of fact and orders were conclusive, if there was no error of law. Unless the board violated some rule of law, its conclusion was final. It was for the complaining party to show such violation. The case was here on the pleadings in which the grounds for the defendants' action in demanding a new certificate were not disclosed. Until it appeared that they acted in violation of some rule of law, their conclusion must stand.

In Massachusetts, a local rule requiring a new certificate every two months was sustained as "not a matter of law so unreasonable or arbitrary as to be invalid." *Spofford* v. *Carleton, 238* Mass. 528, 131 N. E. 314. It was unnecessary to go as far as that, in the present case. If it was assumed that the school board could not regulate the matter by a general rule, but must act on the facts of each individual case, no violation of the plaintiff's rights would appear.

Good Grounds for Refusal to Submit to Operation

(Wallins Creek Collieries Co. v. Hicks et al. (Ky.), 287 S. W. R. 713)

The Court of Appeals of Kentucky, in affirming a judgment which affirmed an award of the compensation board, says that section 6 of the workmen's compensation act of that state provides that

> No compensation shall be payable for the death or disability of an employee if his death is caused, or if and in so far as his disability may be aggravated, caused or continued, by an unreasonable refusal, failure or neglect to submit to or follow any competent surgical treatment or medical aid or advice.

Whether or not the action of an employee in refusing to submit to a surgical operation or in failing to follow competent medical advice is reasonable is almost universally held to be a question of fact to be determined by a careful inquiry into the circumstances of each case. In the instant case the injury for which compensation was sought was a fracture of the leg at the head of the tibia and very close to the knee joint. The employer's physician testified that he advised the injured employee that an operation on the leg was necessary in order to reduce the displacement that necessarily would result but for such operation, and that the condition of the employee at the time of the trial was due in large measure to his refusal to submit to the operation. The testimony of the physician disclosed that he purposed in the operation to make use of metal screws or wires in order to hold the bones in place. But while he believed that the operation would have been successful, he admitted that he could not at any time guarantee that it would be so. He further admitted that in the operation it might be that the fluid in the knee would be drained and the knee joint become stiff, depending on whether infection set in, of which there was some danger. On the other hand, the employee's family physician testified that the lungs of the injured employee had for a number of years been in a very weak condition, and that an anesthetic would in all probability further inflame them, with probable resulting pneumonia. He also testified that, although he did not advise against the operation on account of the proposal to use metal screws or wires, yet he was strongly of the opinion that kangaroo tendons were the only safe means to use to bind the bones together, because during his hospital services it had been his experience that, in the overwhelming percentage of cases in which metal screws or wires had been used, a subsequent operation had to be performed to take them out; also that he thought the danger of infection in the knee joint from the proposed operation highly probable, and that he had advised the injured employee that the operation was by no means an assured success.

Considering these facts, that the injured employee was a man whose lungs were in an inflamed condition, which condition would be aggravated by the anesthetic with very probable resulting pneumonia, which in his condition was exceedingly dangerous to him, and that the physicians could not agree on the character of binders to be used on the bones, and that infection to the knee joint with consequent permanent stiffening of that joint was quite possible during this operation, and the lack of assurance of success of the operation, it could not be said that there was no competent evidence to sustain the compensation board's finding that the refusal on the part of the injured employee to submit to the operation was not unreasonable. This being so, there was nothing for the circuit court to do but to affirm the award of the board so finding, and nothing for this court to do but to affirm that judgment of the circuit court.

Representations of Insured—Not Waiving Privilege

(Travelers' Ins. Co. v. Pomerantz et al. (N. Y.), 218 N. Y. Supp. 490)

The Supreme Court of New York, appellate division, first department, in affirming a judgment for the defendants, says that this was a suit in equity to obtain a rescission of a policy of life insurance on the ground of material misrepresentations in the application for the insurance, which contained the representations: "I am not deformed. I have had no bodily or mental disease, nor have I received medical or surgical attention within the past five years—except as herein stated," no exceptions being noted to the general declaration. The implication from the conjunction of the statements that the applicant had no disease, nor had he received medical or surgical attention within five years, not separated, as was the request for information as to deformity, was that the company was seeking information, not as to temporary disorders or slight functional disturbances, which did not impair the general health or threaten the life of the applicant, but as to ailments and illnesses of severity or gravity, and having some bearing on the physical welfare of the applicant at the time his declaration was made, or which were likely to affect him in the future; that is, it was requiring a declaration as to an impairment of the constitution and functions of the applicant which would be classed in the common mind as a disease. This would exclude infrequent and slight attacks of illness, and include only those grave, important and serious conditions that affect the system and tend to shorten life.

The evidence showed that during the five years prior to the date of the application the insured had been visited by physicians ten or twelve times without continuity and at varying periods. The physicians testified that he was "sick" or "ailing," but on no occasion was sick enough to be in bed. There was no evidence as to just what ailments or illnesses he suffered from at that period or for what he was treated. The testimony concerning prescriptions given to him by the physicians whom he visited indicated that the medicines he received were such as are usually prescribed for a cold, or for a disturbed stomach digestion, or sleeping powders, because he had not slept well on two occasions. The testimony of the several physicians who had attended him on these twelve visits was excluded, because of the privileged

character of the communications had between the physician and the patient, and thus the exact ailment from which he suffered was not made plain. While the insurance company did not urge directly that this court should draw an unfavorable inference from this claim of privilege, which excluded the nature of the disease, yet there was a note in the argument which would give the impression that the court could regard the excluding of this evidence by the defendant as a basis on which to conclude that something unfavorable to him would be disclosed, if the testimony was permitted by waiving the privilege. But such a view loses sight of the fact that proof of material misrepresentations avoiding a contract must be made by the parties asserting them. The defendant was under no duty to waive a statutory privilege for the purpose of assisting the plaintiff in abandoning its contract, if proof could not be made, except through the acquiescence of the defendant, that his previous condition of disease warranted an avoidance of the policy.

Moreover, there was proof which the plaintiff could have made of the physical condition of the applicant, which it either neglected or avoided making. He had advised the plaintiff at the time of his application for its policy that he had the year previous taken out a policy in another company. It also appeared that he was physically examined by a physician of the plaintiff, before its policy was issued. Neither of these physicians was called as a witness at the trial, nor was anything proved which accounted for their absence. From this fact it might be inferred that, when these policies were issued, the examining physicians found the applicant in good health. This testimony could not have been excluded as privileged communications between the patient and the physicians, had it been offered, and would have disclosed any real bodily infirmity, such as was described, as a mental or bodily disease, if it existed.

There was nothing, therefore, on which to found a ruling that the defendant suffered from or was treated for any serious complaint, ailment, illness or disease within the five years prior to the issuance of the policy, within the meaning of the language employed in the application.

Information Obtained by Government Medical Examiner

(Cruce v. Missouri Pac. R. Co. (Ark.), 287 S. W. R. 583)

The Supreme Court of Arkansas, in reversing a judgment that was rendered for the defendant in this personal injury case, says that the plaintiff alleged that a box full of tools fell, striking him with such force that it caused an abrasion of the skin at the back of his neck and the small of his back, which paralyzed his right leg and permanently crippled him. He had served as a private in the World War. He contended that the judgment for the defendant should be reversed on the ground that the trial court had erred in permitting a physician to disclose information obtained in making an examination of him in August, 1921, and in testifying to communications received during the examination from the plaintiff relative to injuries which he had sustained during army service in France. The testimony of the physician was objected to on the ground that the communications and information were privileged, because obtained by a physician in the examination of a patient. The physician was the medical examiner for the government under the veterans' compensation act at the time he examined the plaintiff in August, 1921. The plaintiff had presented a claim to the government for disability compensation. Under that act, veterans of the World War are entitled to medical and hospital services free of charge. The physician testified that he made the examination of the plaintiff with the view of sending him to a hospital, and that, after making the examination, he sent him to the Army and Navy Hospital at Hot Springs. Section 30 of chapter 320, act June 4, 1924, 43 Stat. 615, makes the record confidential and provides that no disclosures shall be made unless within one of the exceptions provided for. This court thinks that in view of the fact that the government furnishes its veterans free medical and hospital services, and the further fact that this physician examined the plaintiff with a view to sending him to a hospital, and did send him to the Army and Navy Hospital at Hot Springs, the confidential relationship between physician and patient attached when the plaintiff presented himself to the physician for examination. The physician's testimony relative to the physical condition of the plaintiff when he examined him, and touching communications he received from the plaintiff in the course of the examination, was incompetent.

Reasonable Precaution Taken to Account for Sponges

(Roark et al. v. Peters et al. (La.), 110 So. R. 106)

The Supreme Court of Louisiana, in affirming a judgment in favor of the defendants, says that this was an action for damages growing out of a cesarean section operation. All the sponges used in the operation had been previously prepared by the nurses who delivered them to the surgeons in the operating room. The sponges were counted by the nurses prior to the operation and put up in packages. The operation was performed and the child safely delivered. All sponges that were visible to the eye or discoverable by touch were removed from the abdomen. The supervising nurse was called on to account for all sponges that had been used in the operation. She counted the sponges and reported one small one missing. Pending a search for the missing sponge, the patient was kept under the anesthetic; and, on the supervising nurse reporting that the missing sponge was found, the operation was completed and the wound closed. The patient did not entirely recover from the operation, and twenty-two days thereafter was again taken to the hospital, and an examination under the roentgen ray and fluoroscope failed to indicate the presence of any foreign substance in the body or the necessity for another operation. The patient continued to suffer, however, and eventually went to Memphis, where a second operation was performed and a large lap or towel sponge was removed from her abdomen, after which operation she regained her health. A number of decisions were cited by both counsel, but the supreme court does not consider it necessary to review them, as the testimony conclusively showed that every reasonable precaution was taken to account for all sponges used in the operation before the wound was closed, while the operation was so properly and skilfully performed that the life of both mother and child was saved, and there was no charge in the petition of any want of skill in the performance of the operation.

Society Proceedings

COMING MEETINGS

American Association for the Study of the Feebleminded, Cincinnati, June 4-6. Dr. H. W. Potter, Thiells, New York, Secretary.
American Ophthalmological Society, Quebec, Canada, June 27-29. Dr. Emory Hill, Professional Building, Richmond, Va., Secretary.
American Psychiatric Association, Cincinnati, May 31. Dr. E. D. Bond, 4401 Market Street, Philadelphia, Secretary.
American Psychopathological Association, Cincinnati, June 3. Dr. M. W. Peck, 520 Commonwealth Avenue, Boston, Secretary.
Illinois State Medical Society, Moline, May 31-June 2. Dr. H. M. Camp, Lahl Building, Monmouth, Secretary.
Maine Medical Association, Portland, June 13-15. Dr. B. L. Bryant, 265 Hammond Street, Bangor, Secretary.
Massachusetts Medical Society, Boston, June 6-8. Dr. W. L. Burrage, 182 Walnut Street, Brookline, Secretary.
Michigan State Medical Society, Mackinac Island, June 14-17. Dr. F. C. Warnshuis, Grand Rapids National Bank Bldg., Grand Rapids, Sec'y.
Minnesota State Medical Association, Duluth, June 30-July 2. Dr. E. A. Meyerding, 11 West Summit Avenue, St. Paul, Secretary.
Montana, Medical Association of, Missoula, July 13-14. Dr. E. G. Balsam, 222 Hart-Albin Building, Billings, Secretary.
National Association for the Study of Epilepsy, Cincinnati, May 30-31. Dr. A. L. Shaw, 108B Olbiston Building, Utica, N. Y., Secretary.
New Hampshire Medical Society, Portsmouth, June 22-23. Dr. D. E. Sullivan, 7 North State Street, Concord, Secretary.
New Jersey, Medical Society of, Atlantic City, June 9-11. Dr. J. B. Morrison, 66 Milford Avenue, Newark, Secretary.
North Dakota State Medical Association, Grand Forks, June 1-2. Dr. J. G. Lamont, San Haven, Acting Secretary.
Rhode Island Medical Society, Providence, June 2. Dr. J. W. Leech, 369 Broad Street, Providence, Secretary.
West Virginia State Medical Association, White Sulphur Springs, June 21-23. Mr. Joe W. Savage, 303 Professional Building, Charleston, Executive Secretary.
Wyoming State Medical Society, Cheyenne, June 27-29. Dr. Earl Whedon, Sheridan, Secretary.

Current Medical Literature

AMERICAN

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American Journal of Diseases of Children, Chicago

33: 363-550 (March) 1927

*Primary Infection in Tuberculosis. E. G. Stoloff, New York.—p. 363.
*Unusual Forms of Periosteal Elevation. S. Karelitz, Hartford, Conn.—p. 394.
*Supplementary Feeding of School Children. A. F. Morgan and M. A. Tanner, Berkeley, Calif.—p. 404.
*Measles Prophylaxis. S. Karelitz, New York, and S. Levin, Ann Arbor, Mich.—p. 408.
*Scarlet Fever: II. Prophylaxis. J. A. Toomey, R. M. Fullerton and M. E. Kishman, Cleveland.—p. 420.
*Id.: III. Cases Untreated by Specific Serums or Antitoxins. J. A. Toomey and E. G. Dolch, Cleveland.—p. 424.
*Transfused Blood in Infants with Severe Malnutrition. H. Bakwin, New York, P. S. Astrowe, Kansas City, and H. Rivkin, New York.—p. 442.
*Lactate Metabolism in Infants. M. B. Brahdy, New York.—p. 451.
Tuberculosis in Childhood: Its Frequency, Sources and Development, and How to Combat It, Shown by Experiments in Norway. F. Harbitz, Oslo, Norway.—p. 458.

Primary Infection in Tuberculosis.—A discussion of the primary infection of tuberculosis in the child is presented by Stoloff, with particular reference to the results obtained in a statistical analysis of 6,329 fluoroscopies made in the outpatient department of the University of Vienna Kinderklinik. There were 584 single primary foci, or 9.27 per cent, and twenty-seven multiple foci, or 9.65 per cent. Localization was lobar, and a comparison was made with the observations of other pathologists and roentgenologists. The distribution of single primary foci in this series was mostly on the right side and in the lower lobes, so that the right lower lobe showed the most foci; next in order were the left lower lobe, the right upper lobe, the left upper lobe and the right middle lobe. Regional disease of the hilum glands (on the same side) was found in 423, or 72.52 per cent, of the cases presenting a single primary focus. Extension from right to left was as frequent as from left to right. Pleuritic involvement was observed in only thirty patients, or 0.05 per cent. The total number of children with definitely positive tuberculin reactions was 4,494, or 71.02 per cent. There were only 253, or 3.8 per cent, children with definitely negative Pirquet and Mantoux reactions. There were 665 children, or 10.6 per cent, who gave a negative Pirquet reaction but on whom further tests were made.

Unusual Forms of Periosteal Elevation.—Karelitz reports two cases of neuroblastoma and leukemia, respectively, in both of which there was roentgen-ray evidence of periosteal elevation of the long bones. He says that periosteal elevation which is nonsyphilitic and not scorbutic in origin in childhood should suggest the possibility of leukemia or allied conditions, or neoplasm such as neuroblastoma.

Supplementary Feeding of School Children.—The supplementary lunches given by Morgan and Tanner to forty-seven children, some underweight, some normal and some overweight, consisted of one orange, four pulled figs and one-half pint of milk. In eight weeks, the average gains in weight of the groups given one orange or four pulled figs daily for supplementary lunch were practically the same, namely, 1.64 and 1.62 pounds. However, some gains were made in 10 per cent more of the group which was given figs than of the control group which was not given any supplementary feeding.

Measles Prophylaxis with Blood Serum.—Karelitz and Levin assert that the best way to prevent measles or to modify its course is by the use of convalescent serum or, if this is not available, by the use of adult serum or whole blood.

Scarlet Fever Prophylaxis.—In a series of cases reported on by Toomey et al., the immunity conferred by active immunization against scarlet fever has lasted for eighteen months. Definite evidence has not developed to justify the use of scarlet fever antitoxin as a measure of passive immunity.

Scarlet Fever Mortality.—In an analysis made by Toomey and Dolch of 1,658 scarlet fever cases in Cleveland, the mortality rate in untreated patients is extremely low. The patients who died had complicating factors which might have caused death, even though scarlet fever antitoxin had been given.

Blood Transfusion in Malnutrition.—The results obtained by Bakwin et al. indicate that the red blood cells of the donor remain in the circulation of the infant receiving transfusion for a considerable length of time.

Lactate Metabolism in Infants.—The possibility of explaining the beneficial effects of lactate milks by the action of the lactate ion is presented by Brahdy. Observations on the lactate of the blood in infants following the feeding of lactic acid milks are compared with control infants following ordinary feedings. Absence of marked variation between the two series leads to the conclusion that the lactate ion does not in any way directly influence the peripheral metabolism. The important rôle of the liver is emphasized, and it is suggested that the lactate ion may act on the complex metabolism in this organ.

American Journal of Tropical Medicine, Baltimore

7: 71-148 (March) 1927

*Pfeiffer Reaction with Leptospira in Yellow Fever. A. W. Sellards, Boston.—p. 71.
Diarrhea in Monkeys (Macacus Rhesus) with Esophagostomum, Strongyloides and Trichomonas Infections. A. Branch and D. M. Gay, New York.—p. 97.
Diet and Disease. W. E. Deeks, New York.—p. 111. (To be Cont'd.)

Pfeiffer Reaction with Leptospira.—The serum from eleven patients examined by Sellards about three and one-half months after recovery from typical yellow fever gave negative Pfeiffer reactions to *Leptospira icteroides* and *L. icterohemorrhagiae*. As controls for these negative tests, the serum of two guinea-pigs immune to *L. icterohemorrhagiae* gave positive Pfeiffer reactions with *L. icteroides* and *icterohemorrhagiae*. These results, therefore, furnish additional evidence of the identity of *L. icterohemorrhagiae* and *L. icteroides*.

Archives of Internal Medicine, Chicago

39: 317-464 (March) 1927

*Effect of Ultraviolet Light on Oxygen Consumption and on Total Metabolism. E. H. Mason, Montreal, and H. H. Mason, New York.—p. 317.
*Carbohydrate Tolerance in Normal Persons and in Nondiabetic Patients. A. H. Rowe and H. Rogers, Oakland, Calif.—p. 330.
*Estimation of Pancreatic Enzymes: Clinical Value of Such Determinations. L. Martin, Baltimore.—p. 343.
*Value of Duodenal Drainage for Diagnosis of Biliary Disease. L. Martin, Baltimore.—p. 356.
*Mineral Salt Content of Blood in Disease. A. S. Blumgarten and G. L. Rohdenburg, New York.—p. 372.
*Ephedrine. W. S. Middleton and K. K. Chen, Madison, Wis.—p. 385.
Comparative Study of Ephedrine, Pseudo-Ephedrine and β-Phenyl-Ethylamine. K. K. Chen, Madison, Wis.—p. 404.
*Glycolysis in Normal and in Leukemic Blood. M. Falcon-Lesses, Boston.—p. 412.
*Erythrocyte Count in Arthritis: I. E. G. Peirce and R. Pemberton, Philadelphia.—p. 421.
*Id.: II. C. Y. Crouter and F. A. Cajori, Philadelphia.—p. 429.
Spastic Esophagus and Mucous Colitis: Treatment by Progressive Relaxation. E. Jacobson, Chicago.—p. 433.
Experimental Peritonitis and Survival Following Intraperitoneal Injection of B. Coli. B. Steinberg and H. Goldblatt, Cleveland.—p. 446.
Passage of Bacteria from Peritoneal Cavity into Lymph and Blood. B. Steinberg and H. Goldblatt, Cleveland.—p. 449.
*Spleens from Gaucher's Disease and Lipoid-Histiocytosis: Chemical Analysis. W. Bloom and R. Kern, Chicago.—p. 456.

Effect of Ultraviolet Rays on Metabolism.—Experiments were made by the Masons to determine whether the total metabolism of the human organism is affected by maximum exposures of ultraviolet rays from a quartz mercury vapor lamp. Studies were conducted in ten cases. Eight of these patients manifested a notable lowering of heat production. This decrease in total metabolism has been associated with a slowing of the pulse rate. In no case was an increase of metabolism found. The subjects who reacted to exposures of ultraviolet rays with a lowering of their total metabolism

were normal persons in whom there was a satisfactory production of pigment, and persons who had an increased quantity of circulating bilirubin. Buckwheat, probably through the medium of phytoporphyrin, can produce a fall in total metabolism after exposure to ultraviolet rays.

Carbohydrate Tolerance.—The research reported on by Rowe and Rogers was inspired by the opinion held by Gray and others that a test meal of 100 Gm. dextrose might do harm to a diabetic patient, and that a starch meal might best be used, at least as a preliminary. In the response of twenty normal and five nondiabetic subjects to a meal of two shredded wheat biscuits and 3 ounces of milk, the average peak at thirty minutes was 142. The average duration was less than two hours. As compared with the average response of these subjects and that of sixteen normal and four nondiabetic subjects to the shredded wheat meal and the usual 100 Gm. dextrose, the curve given by the former is flatter and of shorter duration. A consideration of these data indicates that the shredded wheat meal is a rather small load, and it is suggested that a combination of sugar and shredded wheat and milk be tried. Such a meal would appear to have the advantage of availability, palatability and near approach to an ordinary breakfast. The average curve obtained in four persons given 125 Gm. dextrose, as compared with the average curve for those given 100 Gm., shows a greater elevation of the blood sugar level and a prolongation of the curve. This confirms the observation of others that an increase in the load tends to prolong the curve. A study of sugar elimination in these subjects indicates the presence of glycuresis in many persons following both types of meal. The sharp demarcation between glycuresis and glycosuria suggests the presence of a definite renal threshold.

Estimating Function of Pancreas.—A method of approach which will give a fairly faithful record of the functional state of the pancreas in its production of the so-called external enzymes is offered by Martin. It is described in detail. The amount of equipment needed is small, and the time consumed not much longer than that needed in making chemical studies of the blood. It is of paramount help in making a differential diagnosis between choledocholithiasis and cancer of the head of the pancreas.

Value of Duodenal Drainage.—As a diagnostic procedure, Martin regards medical drainage of the biliary duct as being of relatively little value.

Mineral Salt Content of Blood.—The mineral salt content of the blood was studied by Blumgarten and Rohdenburg in 173 patients suffering from various diseases. The most striking pathologic conditions in which a disturbance of the mineral salts in the blood was determined were carcinoma, leukemia and purpura hemorrhagica. In carcinoma, there was a strikingly low magnesium content and a low calcium content in 50 per cent of the cases, but not so marked a tendency toward hypermineralization. In two cases of leukemia and purpura hemorrhagica there was a marked reduction in the potassium content and a compensatory increase in the sodium and the calcium content, probably as a result of hemorrhage. High magnesium contents were found in arteriosclerosis and in other conditions which usually are associated with advancing years. Chronic nephritis with hypertension showed a low calcium and a high sodium content. Disease of the gallbladder showed a high total salt and a high magnesium content. There were a number of tendencies toward changes in the proportion of various mineral substances in other diseases, but these were not sufficiently striking to be significant.

Action of Ephedrine.—From fifty-eight observations on forty-one patients, Middleton and Chen conclude that ephedrine, in the form of the sulphate or the hydrochloride, when given by mouth (in six instances the drug was injected intramuscularly) in varying doses, causes an average rise of systolic blood pressure of 28.5 mm. of mercury. The average duration of this rise is approximately five hours and nine minutes. The diastolic pressure, as a rule, is also elevated. The pulse is more frequently accelerated than it is slowed. The therapeutic dose advocated for oral administration in adults is from 60 to 90 mg. (1 to 1½ grains). A 10 per cent solution of ephedrine sulphate, or the same concentration with the addition of 0.1 per cent homatropine hydrobromide, may be used locally as a mydriatic for routine ophthalmoscopic examinations. Ephedrine, in a group of twenty-five unselected patients with bronchial asthma, controlled the attacks in nine instances and caused improvement in eight others, but showed inconclusive or negative results in the remainder.

Glycolysis in Normal and Diabetes Blood.—About 100 blood sugar determinations were made by Falcon-Lesses on blood from nine healthy persons, six patients with chronic myelogenous leukemia, and one each with chronic lymphatic leukemia, erythremia and pernicious anemia. None of the leukemic patients had received roentgen-ray or radium treatment for at least a month prior to the test of their blood. Glycolysis in normal blood, in vitro, at body temperature, is complete in six hours when the initial sugar concentration is less than 100 mg. per hundred cubic centimeters. Glycolysis in the blood of chronic myelogenous leukemia patients with a high leukocyte count was from two to three times as rapid as normally, so that the process was often complete in two hours. The large number of leukocytes may not be the only reason for the rapid glycolysis. There is some evidence to suggest that very immature or atypical bone marrow cells hasten the process more than mature or typical ones. Lymphocytes may influence the rate differently from nucleated bone marrow cells. In the blood in one case of erythremia, glycolysis took place more rapidly than in normal blood. By contrast, in the blood from a patient with pernicious anemia, glycolysis was slower than in normal blood. Glycolysis in plasma alone, or in blood after injury to the cells by water, was much slower than in intact blood prevented from clotting with heparin.

Erythrocyte Count in Arthritis.—The observations made by Peirce and Pemberton are interpreted as indicating altered circulatory conditions in arthritis, probably in the nature of vasoconstriction, and are in line with other evidence to the same end. It is also evident that even in normal persons the drop of blood first appearing, especially if the stab is shallow, does not necessarily yield a blood count representative of the general circulation, and hence should be discarded.

Erythrocyte Count in Arthritis.—The conclusions of Peirce and Pemberton are, in general, confirmed by Crouter and Cajori. In normal persons, the erythrocyte count of the first drop of finger blood was frequently (in 43 per cent) higher than the count of the freely flowing blood. The majority of patients with arthritis showed the opposite condition, and had a lower count in the first drop of finger blood than in the freely flowing blood.

Chemical Analysis of Gaucher Spleens.—Bloom and Kern assert that a few cases of a form of large cell splenomegaly, for which the name lipoid-histiocytosis is proposed, have in the past been erroneously reported as examples of Gaucher's disease. The microchemical reactions of the material present in the large cells in lipoid-histiocytosis (Niemann's disease) indicate that this material is lipoid in character and probably belongs to the phosphatid group. In Gaucher's disease, the large cells do not give any of the lipoid reactions in typical manner. They usually give the reaction for iron. Chemical analyses prove the spleen of Niemann's disease to contain less total nitrogen than the Gaucher or the normal spleen, but a decidedly increased amount of phosphorus. The total ether and alcohol soluble extractives are also greatly increased in Niemann's disease. The stored material in lipoid-histiocytosis is chiefly phosphatids, probably lecithin and cholesterol. In Gaucher's disease, the material is chiefly kerasin.

Archives of Otolaryngology, Chicago

5: 209-302 (March) 1927

Studies of Children in Chicago Public Schools for Deaf. G. E. Shambaugh et al., Chicago.—p. 209.
Chronic Rhinopharyngeal Disease. B. R. Shurly, Detroit.—p. 220.
Intranasal Radium Therapy in Malignant and Benign Tumors. E. R. Van Meter, St. Louis.—p. 225.
Chronic Otitis Media Complicated by Cholesteatoma, Labyrinthitis and Suppurative Meningitis. B. F. Glowacki, Detroit.—p. 230.
Endothelioma of Nose. H. A. Fletcher, San Francisco.—p. 234.
Diagnostic Esophagoscopy in Ulcerations. R. McKinney, Memphis, Tenn.—p. 238.

*Fusospirochetal Abscess of Tonsil. I. Pilot, Chicago.—p. 244.
Chronic Tonsillitis: Microscopic Pathology. R. F. Nelson, Oakland, Calif.—p. 249.
*Correction of Saddle Nose. J. N. Roy, Montreal.—p. 258.

Fusospirochetal Abscess of Tonsil.—A chronic form of fusospirochetal infection of the tonsil is described by Pilot. The exudate is usually foul smelling, and contains streptococci in addition to the anaerobes. The lesion is a chronic abscess, often communicating with a tonsillar crypt.

Correction of Saddle Nose.—Roy believes that the ideal method for the correction of depressed nasal deformities consists in making an internal incision and, after having prepared a tunnel, inserting a piece of the cartilage of the first floating rib. When the graft is placed in position, the application of two little bands of adhesive tape transversally to the nasal bones fixes it, and consequently offers better conditions for adhesion with the surrounding tissues. Carried out in this manner, the operation is more likely to be successful by this than by any other method.

Archives of Pathology and Laboratory Medicine, Chicago

3: 361-576 (March) 1927

*Degenerative Changes in Skeletal Muscles, Particularly in Infectious Diseases. B. Stenström, Stockholm, Sweden.—p. 361.
*Diffuse Tumors of Leptomeninges. C. L. Connor and H. Cushing, Boston.—p. 374.
*Fever with Renal Carcinoma. D. Nicholson, Winnipeg, Can.—p. 393.
Anterodemian Mero-Acrania (Nosencephalos) Combined with Hypogastroschisis Dextra and Malformation of Fingers and Toes. E. Pribram, Chicago.—p. 400.
*Atheromatous Degeneration of Arterial Wall: Result of Hydrodynamic Mechanism. V. H. Moon, Indianapolis.—p. 404.
*Determination of Icterus Index. A. L. Brown, New York.—p. 409.
*Preservation of Blood for Chemical Analysis. F. F. Schwentker, Baltimore.—p. 410.
Suprarenal Gland. H. L. Jaffe, New York.—p. 414.

Degenerative Changes in Skeletal Muscles in Various Diseases.—The skeletal muscles were examined by Stenström in forty-seven cases of different diseases at various ages with regard to waxy and fatty degeneration and to brown pigmentation; in all, they proved to be more frequent and general than hitherto known. More or less waxy degeneration was found in all cases, most marked in the diaphragm, but without distinct difference for various age groups and without any relation to the degree of fever. More or less pronounced fatty degeneration was found in thirty-two of forty cases. The diaphragm was possibly a little more often the seat of the changes than the other muscles. In almost every case, waxy degeneration was present also. There was no obvious relation to the general individual state of nutrition. In eighty-eight adults, 4 per cent, fatty degeneration was observed. Any distinct relation between special diseases and muscular fatty degeneration was not established, but in cases of tumor the degeneration seems to be frequent, and in cases of sepsis in adults it is constant. Often there is fatty degeneration of the heart, liver and kidney at the same time. Brown pigmentation was found only in muscles of persons over 50 years of age.

Diffuse Tumors of Leptomeninges.—Two diffuse tumors of the meninges which differed greatly in their microscopic structure are described by Connor and Cushing. In neither case was a primary tumor visible to the naked eye, and without microscopic examination both might have been recorded as examples of pseudotumor cerebri. The first of these tumors represents a true sarcomatosis (endotheliomatosis) of the meninges, the primary lesion apparently being multiple and affecting the adventitial or perivascular sheaths of the cortical blood vessels. The second tumor represents an invasion of the leptomeningeal spaces by largely undifferentiated embryonic cells (medulloblasts). As these primitive round cells, commonly miscalled sarcoma cells, tend to undergo a certain degree of differentiation and when properly stained show occasional neuroglial fibrils, a condition deserving the designation meningiogliomatosis is the consequence. The primary origin of both of these tumors was in the region of the flocculus, an area which appears to be a favorite point of origin for neoplastic lesions.

Fever with Renal Cancer.—Nicholson reports the case of a woman, aged 38, who suffered from gastro-intestinal and urinary disturbances, with vague neuralgic pains, for a period of about two years. Fever, as high as 104 F., was one of the most marked signs and was present almost continuously. Autopsy showed a renal carcinoma of the lower pole of the right kidney, with secondary growths in the left suprarenal, spleen, liver and lungs.

Local Anemia Cause of Atheromatous Degeneration.—Moon asserts that the proposition that arterial hypertension produces local anemia in the artery wall can be mathematically demonstrated. The local anemia thus produced may be a cause of atheromatous degeneration. This explanation is in agreement with many known facts concerning the occurrence and course of such degeneration.

Determination of Icterus Index.—The test devised by Brown is primarily a comparison of the color of the blood plasma or serum with a series of permanent arbitrary standards, consisting of fifteen tubes containing multiples of the unit color, the strength of the color being etched on the tube. A solution of chemically pure potassium dichromate is prepared, 0.15 Gm. being used in 100 cc. of water and 2 drops of concentrated sulphuric acid; a series of dilutions with distilled water, fourteen lower standards, are also prepared. This solution, kept in air-tight containers, is permanent and has the color of a pure bilirubin solution. The permanent standards are placed in white glass tubes of uniform bore and thickness, filled two-thirds full and sealed. An identical tube is graduated with six 0.5 cc. marks; 0.5 cc. of the serum to be examined is placed in this tube. The degree of color of this sample is determined by matching it with the standards that are placed on each side of the specimen tube and examined through small holes against a background of ground glass. The number of the tube which approximates that of the sample is taken as the icterus index of the specimen.

Preservation of Blood for Chemical Analysis.—Schwentker asserts that sodium fluoride and thymol, when used in the proportions of 0.01 Gm. of fluoride and 0.001 Gm. of thymol to each cubic centimeter of blood, are efficient preservatives when the blood is analyzed by the Folin-Wu system. This preservative mixture is equally effective for the determination of creatinine, uric acid, urea and nonprotein nitrogen, when the system of analysis as outlined by Victor Myers is employed. It may not be used, however, when the sugar values are determined by the Lewis Benedict method, since consistently greater results varying from 7.5 to 50 per cent are obtained. This increase is apparently due to a chemical participation of the preservatives in the reactions of the analysis.

Archives of Surgery, Chicago

14: 621-792 (March) 1927

*Fat Embolism: Experimental Production Without Trauma. E. P. Lehman and R. M. Moore, St. Louis.—p. 621.
*Undescended Testis. O. H. Wangensteen, Minneapolis.—p. 663.
*Cardiac Output in Dog During Ether Anesthesia. A. Blalock, Nashville, Tenn.—p. 732.
*Experimental Chronic Duodenal Obstruction. B. N. Berg, F. L. Meleney and J. W. Jobling, New York.—p. 752.
*Id.: II. F. L. Meleney, B. N. Berg and J. W. Jobling, New York.—p. 762.
Review of Urologic Surgery. A. J. Scholl, Los Angeles, and others.—p. 772.

Fat Embolism.—Lehman and Moore report the results of their studies, but make no claims or assertions. They believe that their review emphasizes the absence of agreement on any phase of the problem, and does not offer a single logical explanation to unify the varying clinical and pathologic observations.

Undescended Testis.—This extensive experimental and clinical study by Wangensteen is summarized very briefly, as follows: The undescended testis owes its imperfection to its position. Scrotal fixation of the undescended testis in its physiologic position before the histologic changes incident to puberty occur will enable it to develop normally. The bibliographic references given number 302.

Cardiac Output During Ether Anesthesia.—Blalock used the Fick method, and found that ether anesthesia causes an

increased cardiac output (average increase 76 per cent). The output is less than normal only when the degree of anesthesia is profound. The increased output is not associated with an increased oxygen consumption, but is associated with a diminution in the oxygen coefficient of utilization. This change is associated with an increase in the hydrogen ion concentration of the blood, with a decrease in the carbon dioxide content of the blood, and may or may not be accompanied by a diminution in the percentage saturation of the arterial blood.

Experimental Chronic Duodenal Obstruction.—A method of producing chronic duodenal obstruction in the dog is described by Berg et al. A wide fascial flap, attached by a broad pedicle to the posterior sheath of the rectus muscle, is used to obstruct. Dilatation and hypertrophy of the duodenum developed above the obstruction. Fluoroscopic examinations confirmed the existence of prolonged duodenal stasis. Alterations in the contractions of the antrum, the pyloric sphincter and the duodenum occurred, and a rhythmic cycle between the three was observed. Except for emaciation in some of the dogs and occasional vomiting, there were no symptoms of intoxication.

Bacterial Flora of Chronically Obstructed Duodenum.—In the duodenum of dogs, certain bacteria are normally present. After partial obstruction of the duodenum, Meleney et al. found that these organisms are enormously increased in numbers, varying with the degree of obstruction and the extent of dilatation of the intestine above the obstruction. The greatest increase in numbers was with the organism of the *Bacillus coli* group, but there was no striking difference between this and the other types. This increase was maintained for a considerable period, but in some cases there was a decrease later, even though the obstruction persisted. The flora of the duodenum in any particular animal was not constant, now one and now another type predominating. The intestine immediately below the obstruction was usually more or less collapsed. In more than half of the cases of this series there were fewer viable organisms in the lower jejunum far below the obstruction than in the intestine just above the obstruction.

Endocrinology, Los Angeles

10: 541-656 (Nov.-Dec.) 1926

*Mode of Transport of Thyroxin by Blood. B. M. Zavadovsky and M. A. Novikov, Moscow.—p. 541.
Application of Axolotl Metamorphosis Reaction to Quantitative Assay of Thyroid Gland Hormones. B. M. Zavadovsky and E. V. Zavadovsky, Moscow.—p. 550.
*Anaphylaxis and Internal Secretions. C. Hajós, Budapest, Hungary. —p. 560.
*Effect of Extracts of Posterior Lobe of Pituitary Body on Circulation. S. Vincent and F. R. Curtis, London.—p. 567.
*Cardaissin: New Cardiac Accelerator Extracted from Suprarenal Gland. H. G. Cameron, Saskatoon, Sask.—p. 577.
*Pancreas in Tuberculosis. L. G. Robinovitch, Golden, Colo., and G. W. Stiles, Jr., Denver.—p. 602.

Mode of Transport of Thyroxin by Blood.—The results obtained by Zavadovsky and Novikov indicate that the serum appears to play a dominant and exclusive rôle in the matter of carrying thyroxin. Erythrocytes do not play a part in the matter of transporting this hormone. Fibrin plays a passive rôle.

Anaphylaxis and Internal Secretions.—Hajós asserts that sensitiveness in experimental anaphylaxis is increased by thyroid extract and by insulin; is decreased by parathyroid extract, epinephrine and extract of the posterior lobe of the hypophysis, and is uninfluenced by extracts of the gonads, corpus luteum and the anterior lobe of the hypophysis. Clinical anaphylactic sensitiveness and idiosyncratic symptoms are increased in hyperthyroidism and exophthalmic goiter, and under insulin and thymus treatment; are decreased by epinephrine, by extracts of the parathyroids and the posterior lobe of the hypophysis, and in myxedema; and are uninfluenced by extracts of the anterior lobe of the hypophysis. Change in the function of the female sex glands may condition either increased or decreased clinical anaphylactic sensitiveness.

Effect of Posterior Pituitary on Circulation.—It is stated by Vincent and Curtis that extracts of fresh posterior lobe of the pituitary do not produce a fall of blood pressure as a result of second or subsequent doses in dogs, cats and rabbits under ether or chloral with dextrose anesthesia, with or without morphine, atropine and curare. Under these conditions, extracts of dried posterior lobe, on the other hand, ultimately produce a pure depressor effect, owing to contaminating depressor bodies, the contrast between first and second injections being especially marked when morphine and curare are administered to the animal. The injections should be given at such a rate that equal volumes of saline solutions injected at the same rate will not produce a fall of blood pressure.

Cardaissin.—A new compound has been extracted by Cameron from the suprarenal glands of cattle to which he gives the name cardaissin. It has been found to increase the heart rate. It does not affect any other organ than the heart, with the possible exception of the suprarenal glands. It accelerates the rate of the isolated heart of a guinea-pig as much as 120 beats for forty-five minutes. When injected subcutaneously, it increases the heart rate of various normal mammals for long periods of time.

Rôle of Pancreas in Tuberculosis.—Robinovitch and Stiles believe that the defensive agent of the pancreas against tuberculosis seemed to be the lipase of the pancreas.

Journal of Industrial Hygiene, Baltimore

9: 77-108 (March) 1927

Flatfoot and Extension Boot Heel. H. R. Conn, Akron, Ohio.—p. 77.
*Vaccine Treatment to Prevent Colds. S. J. Repplier and W. G. Leaman, Jr., Philadelphia.—p. 85.
*Metal Fume Fever Following Experimental Inhalation of Zinc Oxide. C. C. Sturgis, P. Drinker and R. M. Thomson, Boston.—p. 88.
*Id.: II. Resistance Acquired by Inhalation of Zinc Oxide. P. Drinker, R. M. Thomson and J. L. Finn, Boston.—p. 98.

Preventing Colds by Vaccine Therapy.—Accurate follow-up data by Repplier and Leaman of 125 patients inoculated in the fall of 1925 with a stock respiratory vaccine, when examination had demonstrated the absence of nose and throat infection, shows thirty-eight, or 30.4 per cent of the series, completely successful, with an additional sixty-six, or 52.8 per cent, demonstrating markedly increased resistance to upper respiratory involvement for a period of one year. Reaction, either local or general, to the inoculations seems to be followed by a higher degree of immunity.

Experimental Metal Fume Fever.—Two cases of metal fume fever following experimental inhalations of freshly generated zinc oxide are described by Sturgis et al. The subjects were observed clinically for fifty-two hours after their exposure. Typical febrile reactions occurred, and a marked leukocytosis followed the course of the fever and persisted for some twelve hours after the body temperatures had returned to normal. The vital capacities diminished as the temperatures increased; in one subject, the maximum diminution was 53 per cent, in the other, 18 per cent. In both cases, this subnormality persisted for about fifteen hours after the fever had subsided. Changes in blood pressure were found not to be significant; roentgen-ray examination of the lungs and analyses of the urine were negative.

Resistance Acquired by Inhalation of Zinc Oxide.—Resistance acquired by inhalation of zinc oxide fume on successive days is reported by Drinker et al. in two typical cases. In the first case, the subject was exposed to air containing a concentration of about 52 mg. of zinc per cubic meter of air and the next day was resistant to a three-hour exposure in air containing 330 mg. of zinc per cubic meter. In the second case, another subject inhaled 23 mg. of zinc (as zinc oxide), and as a result developed a fever of 101.2 F. (38.4 C.). A second inhalation of 33 mg. of zinc under like conditions but in a heavier fume concentration caused a slight malaise, and raised the body temperature to a maximum of 99.5, where it remained for about eight hours. It is estimated from former experiments on this subject that, without acquired resistance, the temperature would have risen to about 102.5 F. (39.2 C.). A pronounced leukocytosis was caused by the first inhalation and, while the white blood cell count was still high (16,000), the second inhalation took place. The count then remained at more than 10,000 for the

next twenty-seven hours. On the day after their first inhalations of zinc oxide, both subjects experienced the weakness and debilitation that follow typical attacks. On the day after their second exposures, both were free of these symptoms and felt themselves to be in normal health.

Laryngoscope, St. Louis

37: 157-234 (March) 1927

Facial Reconstructive Surgery. J. Maliniak, New York.—p. 157.
*Ear, Nose and Throat Findings of Nine Thousand Seven Hundred and Fifty-One Students. P. S. Stout, Philadelphia.—p. 170.
Testing Hearing with Spoken Voice. D. Nussbaum, Philadelphia.—p. 176.
*"Hearing" by Touch. R. H. Gault, Northampton, Mass.—p. 184.
Treatment of Chronic Progressive Middle Ear Deafness. L. W. Oaks and H. G. Merrill, Provo, Utah.—p. 190.
Chronic Progressive Deafness. R. E. Parrish, Washington, D. C.—p. 198.
Otitic Meningitis and Brain Abscess. V. K. Hart, Statesville, N. C.—p. 208.
Uses of Ephedrine in Rhinology. C. C. Merkel, Iowa City.—p. 212.
*Tobacco, Alcohol and Cosmetics in Relation to Upper Respiratory Tract. W. Freudenthal, New York.—p. 217.
Temporosphenoidal Abscess with Word-Deafness, Hemiplegia and Hemianopsia. J. D. Whitham, New York.—p. 231.

Rhinolaryngologic Examination of Students.—Since 1920, the freshmen entering the University of Pennsylvania have been examined physically by ten medical men. Of 2,079 students entering in 1925, 13 per cent had diseased tonsils; 9 per cent had enlarged tonsils; 16 per cent had defective hearing; 4 per cent had defective vision and 5 per cent had obstructed nostrils.

Hearing by Touch.—Gault discusses a method of lip-touch hearing in which the subject holds in his hand a telephone receiver, the thumb being placed on the diaphragm. Particulars are not given.

Tobacco, Alcohol and Cosmetics in Relation to Respiratory Tract.—From a medical or rather laryngeal point of view, Freudenthal sees no reason why anybody should give up tobacco or alcohol, if it does no harm to him. The use of either one of them or both in moderation by millions of people is proof enough of its harmlessness; in fact, in many instances, it has a beneficial effect on the human organism. The abuse of tobacco and alcohol has been and always will be condemned. From the use of cosmetics, Freudenthal has not seen any good at all. They are condemned from every point of view.

Maine Medical Association Journal, Portland

18: 39-60 (March) 1927

Example of Way Maine's "Health Plan" Actually Functions. F. Y. Gilbert.—p. 39.

Nebraska State Medical Journal, Norfolk

12: 81-120 (March) 1927

Goiter. B. B. Davis, Omaha.—p. 81.
Herpes Simplex. S. R. Gifford, Omaha.—p. 87.
Fracture Treatment. C. G. McMahon, Superior.—p. 91.
Mechanism of Presenting Symptoms in Pulmonary Tuberculosis. M. J. Breuer, Lincoln.—p. 94.
Surgical Pitfalls. J. E. Summers, Omaha.—p. 98.
Obstetric Pitfalls. P. Findley, Omaha.—p. 100.
Treatment of Bone and Joint Infections of Fingers. H. W. Orr, Lincoln.—p. 104.
Who Should Refract? J. M. Patton, Omaha.—p. 105.
Acute Panophthalmitis: Case. D. D. Sanderson, Lincoln.—p. 109.
Gangrene of Lung: Case. C. H. Waters, Omaha.—p. 110.

New York State Journal of Medicine, New York

27: 219-275 (March 1) 1927

Accidental Hemorrhage: Thirty-Four Cases. G. L. Brodhead, New York.—p. 219.
Diseases of Thyroid. A. S. Jackson, Madison, Wis.—p. 225.
Prenatal Care. A. B. Davis, New York.—p. 235.
Migraine. E. F. Hartung, New York.—p. 240.
Plea for Better Reporting of Tuberculosis Cases. R. E. Plunkett, Albany.—p. 243.

Philippine Islands Medical Association Journal, Manila

7: 27-68 (Feb.) 1927

Lightening White Man's Burden. C. Reyes, Manila.—p. 27.
Standardization of Digitalis. F. Garcia, R. Guevara and J. E. Jimenez, Manila.—p. 41.

Southwestern Medicine, Phoenix, Ariz.

11: 55-110 (Feb.) 1927

Problem of Coronary Sclerosis. G. Werley, El Paso, Texas.—p. 55.
Size of Heart as Index of Cardiac Efficiency. O. H. Brown, Phoenix.—p. 57.
Diarrheal Diseases in New Mexico. J. G. Wilson, El Paso, Texas.—p. 61.
Report on Two Hundred Cases of Acute Appendicitis. W. W. Watkins, Phoenix.—p. 65.
Appendicitis: History. J. M. Greer, Mesa, Ariz.—p. 66.
Id.: Pathology. H. P. Mills, Phoenix.—p. 70.
Id.: In Adults: Symptoms. H. B. Gudgel, Phoenix.—p. 71.
Id.: Diagnosis in Children. D. Fournier, Phoenix.—p. 73.
Id.: Treatment. E. P. Palmer, Phoenix.—p. 75.
Id.: Anesthesia. S. I. Bloomhardt, Phoenix.—p. 77.
Three Cases of Scarlet Fever in Same Family. J. A. Rawlings, El Paso, Texas.—p. 80.
Case of Amebic Cystitis. E. B. Rogers, El Paso, Texas.—p. 81.

Surgery, Gynecology and Obstetrics, Chicago

44: 289-258 (March) 1927

Involuntary Nervous System and Abdominal Disease. J. Fraser, Edinburgh.—p. 289.
*Phlegmonous Gastritis. K. A. Meyer, W. A. Brams and C. Guy, Chicago.—p. 301.
*Fibromyxosarcoma of Stomach in Case of Neurofibromatosis. H. Hartman, San Francisco.—p. 308.
Torsion of Spermatic Cord: Fifteen Cases. M. F. Campbell, New York.—p. 311.
Nephrolithiasis: Seventy-One Cases. D. N. Eisendrath, Chicago.—p. 317.
*Experimental Studies in Pulmonary Suppuration. E. Holman, L. R. Chandler and C. L. Cooley, San Francisco.—p. 328.
Cancer Problem. W. J. Mayo, Rochester, Minn.—p. 340.
Relation of Postoperative Achlorhydria to Cure of Gastric and Duodenal Ulcers. R. Lewisohn and L. Ginzburg, New York.—p. 344.
*Incidence of Carcinoma of Uterus Among Jewish Women. A. Horwitz, Rochester, Minn.—p. 355.
*Compression of Duodenum by Mesentery and Superior Mesenteric Vessels: Cause of Acute Gastric Dilatation. L. H. Slocumb, St. Louis.—p. 359.
*Biologic Principles in Treatment of Uterine Myoma. M. Henkel, Jena, Germany.—p. 365.
Operation for Traumatic Rupture of Urethra in Male. F. A. Besley, Waukegan, Ill.—p. 372.
Treatment of Annular Gangrene of Small Bowel by Invagination. J. E. Summers, Omaha.—p. 374.
*Aseptic Method of Entero-Anastomosis. C. A. Perret, Berne, Switzerland.—p. 378.
*Effect of Acute Perforation on Course of Peptic Ulcer. A. McGlannan and H. F. Bongardt, Baltimore.—p. 390.
*Internal Drainage of Gallbladder Routine Procedure. W. A. Steel, Philadelphia.—p. 393.
Repair of Cicatricial Contractures of Neck. C. N. Dowd, New York.—p. 396.
Prolapse of Urethra in Female Children. T. N. Hepburn, Hartford, Conn.—p. 400.
Enteromesenteric Cysts: Two Cases. J. A. Green, Rockford, Ill.—p. 401.
Splint for Overcoming Contractures of Fingers. A. H. Montgomery, Chicago.—p. 404.
Primary Thyroidectomy for Exophthalmic Goiter. A. S. Jackson, Madison, Wis.—p. 406.
*Effect of Sterilization on Horsehair. J. E. Schaefer, St. Louis.—p. 411.

Phlegmonous Gastritis.—Two cases of phlegmonous gastritis are reported by Meyer, Brams and Guy to emphasize the fact that this condition is not rare. The clinical picture combines the features of the so-called acute surgical abdomen with the phenomena of generalized sepsis.

Neurofibromatosis and Fibromyxosarcoma of Stomach.—A case of multiple neurofibromatosis associated with an intra-abdominal sarcoma is reported by Hartman. This presumably arose in a neurofibroma of the stomach wall. The presence of a rapidly growing intra-abdominal tumor associated with von Recklinghausen's disease should, therefore, suggest the possibility of sarcomatous degeneration of a previously benign neurofibroma.

Pulmonary Suppuration.—Tuberculous emboli introduced by Holman, Chandler and Cooley into the jugular vein were arrested in the pulmonary circulatory bed, where they initiated pathologic changes in the pulmonary tissue resulting successively in anemia, infarction, caseation, central softening and abscess formation. The earliest appearance of a well defined abscess following the introduction of the tuberculous embolus was on the twelfth day, whereas pyogenic emboli produced abscesses within four and six days. A relative lymphocytosis accompanied the tuberculous processes in the

lungs, as contrasted with a true polymorpholeukocytosis that characterized the pyogenic processes. The embolus, as such, produced only slight changes in the pulse and the respiratory rates. Positive blood cultures were obtained in a number of instances as early as twenty-four hours following the introduction of pyogenic emboli. Good healing of the bronchial stump occurred in every instance following an atraumatic inversion of the stump by sutures placed in the peribronchial tissues.

Incidence of Carcinoma of Uterus in Jewish Women.—Of 1,237 cases of primary carcinoma of the uterus seen at the Mayo Clinic between 1920 and 1925, inclusive, 1,227 were among Gentiles and ten were among Jewesses. From data obtained by Horwitz at the Curie Hospital, where two thirds of the patients were treated for carcinoma by roentgen rays or radium, the incidence of carcinoma was slightly less for the Jewish patients (62 per cent), as compared with carcinoma in the Gentiles (66 per cent). Carcinoma of the uterus is comparatively infrequent among Jewesses, being about one fourth as frequent as in the Gentile women (3.9 per cent as compared with 16.5 per cent). Carcinoma of the breast in the female is common among Jewesses and almost equals the percentage in Gentile women, the incidence being 26.4 per cent and 28.3 per cent, respectively. Carcinoma of the digestive tract, including the liver and pancreas, was almost twice as frequent in the Jew as in the Gentile, being 30.2 per cent and 17.1 per cent, respectively.

Cause of Acute Gastric Dilatation.—Slocumb agrees with other observers that acute dilatation of the stomach comes about as the result of compression of the third portion of the duodenum by the mesentery and the superior mesenteric vessels. It never occurs unless there is first present atony of the duodenum. It occurs in its milder form quite frequently and usually goes unrecognized. Any patient who has been subjected to shock should not be allowed to remain face upward in bed for any considerable length of time. Preoperative purgation and postoperative administration of morphine are to be avoided as much as possible. If surgical measures become necessary, duodenojejunostomy is anatomically and physiologically the operation of choice.

Treatment of Uterine Myoma.—According to Henkel, nothing has set back the scientific investigation of uterine myoma and its correct treatment so much as the fact that up to the present time morbid anatomy has occupied so prominent a place in the study of the condition, and, secondly, the fact that roentgen-ray therapy is so extensively used in its treatment. Pathologic anatomy does not permit the abandoning of the idea that a myoma is a local disease of the uterus, and roentgen-ray therapy, through its often uncritical application and the prejudiced view of the surgeons, has been a great obstacle in that the proper treatment has not always been chosen for the individual case. This may explain the fact that at the present time no reliable data concerning the origin and correlations of uterine myoma are available.

New Method of Entero-Anastomosis.—Perret has devised a method of entero-anastomosis which makes it possible to join two loops of intestine, or a loop of intestine and the stomach, without opening the lumen of either viscus.

Effect of Perforation on Peptic Ulcer.—McGlannan and Bongardt conclude that after recovery from acute perforation of a peptic ulcer, the majority of patients go on to permanent cure of the ulcer; a few are not completely cured, but do recover sufficiently to lead a comfortable and active life; a very small minority have recurrence or persistence of the ulcer symptoms, and some will require secondary operations for their cure.

Internal Drainage of Gallbladder.—Steel asserts that internal drainage of the gallbladder (cholecystoduodenostomy or cholecystogastrostomy) results in a lower mortality than cholecystectomy and accomplishes the same purpose. Cholecystitis does not recur as it often does after cholecystectomy. Internal drainage eliminates common duct surgery. For these reasons, it is the operation of choice in cases of infected gallbladder. It is contraindicated in acute or subacute pancreatitis.

Effect of Sterilization on Horsehair.—Various methods usually employed to sterilize horsehair were tested by Schaefer. Autoclaving was shown to be the least injurious to the horsehair. It does not appreciably affect the tensile strength of the hair.

Tennessee State Medical Association Journal, Nashville

19: 207-235 (Dec.) 1926

Polycystic Kidney. M. G. Spingarn, Memphis.—p. 207.
Traumatic Rupture of Kidney. E. R. Campbell, Chattanooga.—p. 209.
Milk Injections in Treatment of Infections of Female Genital Tract. R. S. Duke, Nashville.—p. 213.
Neurologic Complications of Mastoid Disease. F. E. Hasty, Nashville.—p. 216.
Migraine. L. C. Sanders, Memphis.—p. 221.
Electrocoagulation of Tonsils. E. Goyer, Jackson.—p. 225.
Twilight Sleep: Three Hundred and Fifty Cases. S. Meeker, Memphis.—p. 229.

19: 237-270 (Jan.) 1927

Treatment of Corneal Ulcers. L. M. Scott, Jellico.—p. 237.
Cycloplegic's Complications. E. C. Ellett, Memphis.—p. 242.
Syphilis. J. Y. Alexander, Middleton.—p. 247.
Conservation of New-Born. J. C. Ayres, Memphis.—p. 250.
Empyema. L. B. West, Chattanooga.—p. 254.
Symptoms Indicating Nasal Sinus Surgery. T. L. Davis, Chattanooga.—p. 257.
Traumatic Shock. J. C. Burch, Nashville.—p. 263.

U. S. Veterans' Bureau Med. Bull., Washington, D. C.

3: 197-291 (March) 1927

Administration of Medical Service, Regional Offices. G. C. Skinner.—p. 197.
Value of Periodic Inspection in Hospitals. J. E. Dedman.—p. 201.
Physical Exercise as Therapeutic Measure. F. A. Davis.—p. 204.
Parkinsonian Syndrome, Following Epidemic Encephalitis. E. J. Rose.—p. 210.
Residua of Epidemic Encephalitis Among Negro Veterans. T. T. Tildon.—p. 214.
Differentiation of Etiologic Factors in Parkinsonian States of Epidemic Encephalitis and Syphilis. J. A. Nelson.—p. 218.
*Home Treatment in Pulmonary Tuberculosis. C. J. Stevens.—p. 223.
*Smallpox Vaccination and Pulmonary Tuberculosis. F. W. Schwarz.—p. 226.
Iodized Oil: Contraindications. A. Blumberg.—p. 228.
Book Therapy in Veterans' Hospitals. E. Pomeroy.—p. 231.
*Unusual Tumor Involving Hypophysis and Gasserian Ganglion. R. L. Benson.—p. 236.
Case of Rapidly Advancing Tuberculosis. A. J. Bondurant.—p. 241.
Functions of Liver and Their Appraisal. W. D. Fleming.—p. 266.
Plea for Humanizing Hospitals. T. E. Pedersen.—p. 269.

Home Treatment of Tuberculosis.—Stevens stresses the fact that hospitalization is essential for all active cases of pulmonary tuberculosis, as an efficient continuous treatment can only rarely be provided patients on outpatient relief status. Home treatment, in most instances, is difficult to put in application, unsatisfactory as to the results obtained, and unless granted in carefully selected cases, is a decided break in the continuity of treatment.

Smallpox Vaccination and Pulmonary Tuberculosis.—On the basis of an experience with forty-five cases of tuberculosis, Schwarz believes that a person suffering from pulmonary tuberculosis of any stage may be vaccinated against smallpox with impunity.

Tumor of Hypophysis and Gasserian Ganglion.—Benson records the case of a man who had suffered from infection of the right ear for about five years, preceded by a history of previous tonsillar hypertrophy. Mastoid and inner ear infection, with extension to the petrous portion of the temporal bone, had been present for a considerable period of time. A terminal meningitis was due to an extension through the periosteum at an undetermined point. At the necropsy there was found a malignant tumor which occurred coincidently with the infectious process, probably of embryonal origin, possibly in an anlage of the pars intermedia of the hypophysis. The resemblance of this tumor to pars intermedia tissue was striking. It was impossible to state which was the antecedent condition, the neoplasm or the infection, but the presumption was strongly in favor of the former. One process or the other, or both, involved the right middle ear, right inner ear, and facial canal, the gasserian ganglion of the fifth cranial nerve, the hypophysis to a slight extent, and the first and second cranial nerves.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted below. Single case reports and trials of new drugs are usually omitted.

Archives of Disease in Childhood, London

2: 1-70 (Feb.) 1927

*Bone Changes Occurring in Renal and Celiac Infantilism; Relationship to Rickets: I. Renal Rickets. L. G. Parsons.—p. 1.
*Infantile Factor in Failure of Breast Feeding. H. St. Vertue.—p. 26.
*Cholemia: Nervous Symptoms in Liver Atrophy. J. C. Spence and A. G. Ogilvie.—p. 41.
*Use of Banana Pulp in Feeding of Marasmic Infants. H. Thursfield.—p. 49.
Ketonemia, Cyclical Vomiting and Some Nervous Disturbances in Children. H. C. Cameron.—p. 55.
*Acute Rheumatism. F. J. Poynton.—p. 62.

Bone Changes of Renal Infantilism.—The clinical characteristics, and the chemical and roentgenographic observations in five hitherto unpublished cases of renal infantilism with bone changes are discussed by Parsons, and an attempt is made to classify the bone changes and to explain their pathogenesis. Evidence is submitted that the bone deformities are rachitic in nature, but the author has not been able to produce a cure in renal rickets by ultraviolet irradiation, whereas in celiac rickets such treatment results in cure. The explanation of these results is probably to be found in the fact that ultraviolet rays raise the blood phosphorus by increasing phosphorus absorption, and therefore treatment by this method makes the disparity between the calcium and phosphorus even more marked. Parsons thinks the tendency is very definitely to make the disease worse. The factors necessary for the prevention of rickets are usually stated to be an adequate supply of calcium, phosphorus and vitamin D in the dietary. Renal rickets develops and persists in spite of an adequate supply of all these factors, and hence the suggestion of Shipley that under certain conditions rickets may have an endogenous origin appears to be incontrovertible. The bone deformities of renal infantilism are those of true low-calcium rickets. The roentgenograms show that a case of renal infantilism may develop bone changes of one of three types: (*a*) atrophic rickets; (*b*) florid rickets; (*c*) woolly rickets. The primary cause of renal rickets is the inability of the kidney properly to excrete phosphate; i. e., a true endogenous rickets exists. The blood shows marked lipemia, nitrogenous and phosphate retention and an acidosis. Blood calcium, while low compared with blood phosphorus, frequently shows normal values, in contradistinction to what usually obtains in azotemic nephritis and after the injection of phosphate. The suggestion is made that this is due to mobilization of calcium from the bones as a preventive mechanism against tetany. Healing of rickets may occur in those periods in which phosphorus excretion improves materially, or when the growth period is over.

Causes of Failure of Lactation.—A true failure of lactation is regarded by St. Vertue as being a relatively uncommon event. It occurs in less than half of all cases seen. It is due to abnormality or disease in either mother or child. Disease of the child is the more important of the two causes of true failure. It occurs in the first few weeks of life. Interference with the suction stimulus is the important basis of the failure of lactation. Disease of the suction apparatus is therefore the usual underlying cause, either in the child's mouth, or his nose or respiratory system, or in the nipple or breast itself. Maternal ill health is a much less effective cause of true failure of lactation. It is widely stressed in books; it is obtrusively advertised on the hoarding by the proprietors of patent foods, and it is firmly believed in by the mothers themselves. But in reality it is rare. Nervous unrest is a very common cause of failure. Practically half the cases of failure to breast feed are not due to a failure of the function at all, but simply to mismanagement or to the interference of some outside influence.

Nervous Symptoms in Liver Atrophy.—Twenty-one cases of liver atrophy are analyzed by Spence and Ogilvie. Five were in children aged 14 or less. These were traced from a total number of 4,958 postmortem examinations in a period of thirteen years, and thus represent only the fatal cases which occurred in this time. The pathologic changes in the liver in these cases were, in one case, acute atrophy (acute yellow atrophy) and in twenty cases, subacute yellow atrophy. In all five cases in children, and in eleven of the adult cases, a certain sequence of nervous symptoms characterized the terminal or "cholemic" stage. This was more evident in the children than in the adults and consisted of lethargy or stupor, and a period of unusual shrieking and wailing which the authors term "cholemic crying." It was not present in all cases, but when it occurred it was distinctive, differing from mere toxic delirium. Jaundice was present in all cases but varied greatly in degree. In four of the cases of the subacute type with ascites and jaundice, the acute cholemic stage was precipitated by tapping the abdomen to relieve abdominal discomfort. A terminal pyrexia was noted in five cases, in only two of which there was bronchopneumonia. In six cases there was evidence of syphilis and treatment by arsphenamine, and in one other case, evidence of congenital syphilis without treatment by arsphenamine. The clinical picture of the cholemic stage in this group did not differ from that of the other cases.

Feeding Banana Pulp to Marasmic Infants.—An account is given by Thursfield of a method of feeding "difficult" infants with banana pulp. It is said that by this method progress is secured in many cases which is superior to that obtained by other methods. It is suggested that the benefit is due not to any known peculiarity of the banana as a food, but possibly to some unidentified element in the banana.

Acute Rheumatism; Unusual Manifestations.—Six cases are reported by Poynton. In one case the prominent feature was the occurrence of many nodules without any grave disease. In another case, the attack of acute rheumatism was initiated by an acute heart block. In a third case, enlargement of the thyroid was coincident with a severe cardiac rheumatism. In three cases there was dumbness with the chorea. All these three children were excitable and intelligent even for rheumatic children.

British Journal of Experimental Pathology, London

8: 1-92 (Feb.) 1927

*Measuring Population of Hemolytic Streptococci in Blood. E. W. Todd.—p. 1.
*Separation of Virulent Cultures of B. Diphtheriae into Virulent and Avirulent Types. M. L. Cowan.—p. 6.
*Rôle of Reticulo-Endothelial System of Cutis in Experimental Vaccinia and Other Infections. J. C. G. Ledingham.—p. 12.
*Unexplained Difficulties Met with in Cultivating Gonococcus: Part Played by Amino-Acids. J. W. McLeod, B. Wheatley and H. V. Phelon.—p. 25.
Experiments on Streptococcal Hemolysin and Antagonistic Action of Bile and Bile-Salts. J. Gordon.—p. 38.
*Excitation of Bactericidal Fluorescence by Means of Roentgen Rays. P. R. Peacock and L. E. H. Whitby.—p. 43.
Wright's Centrifuge Method of Estimating Phagocytosis and Rate of Opsonization of Bacteria by Normal Serum. A. Fleming.—p. 50.
*Inhibition of Insulin Action by Toxemias: I. Effect of Diphtheria Toxin on Blood Sugar and Insulin Action in Rabbits. R. D. Lawrence and O. B. Buckley.—p. 58.
*Simultaneous Determinations of Arterial and Venous Blood Sugars in Diabetic Individuals. I. M. Rabinowitch.—p. 76.
*Proteins of Cerebrospinal Fluid. L. F. Hewitt.—p. 84.

Enumerating Streptococci in Blood.—A method has been devised by Todd for measuring changes of streptococcal population in defibrinated blood under conditions that favor the bactericidal action of leukocytes. Continued movement of the defibrinated blood during incubation results in a very great increase in the bactericidal effect exerted. This increase in bactericidal action is associated with a greatly increased intake of streptococci on the part of the leukocytes.

Experimenting with Virulence of B. Diphtheriae.—The indications from the experiments recorded by Cowan are all in the same direction; from a virulent culture of *Bacillus diphtheriae* can be separated an avirulent, nontoxin producing type which ferments dextrose and maltose but not saccharose, and which, from its resemblance in cultural and morphologic characteristics and lack of virulence to the "R" type of streptococci, has been designated the "R" type of *B. diphtheriae*.

Rôle of Reticulo-Endothelial System of Skin.—Ledingham's experimental results and histologic observations lend strong support to the view that the primary attack of the vaccine virus is on the reticulo-endothelial system and not on the epidermal elements, as most of the older writers and some contemporary workers, notably Levaditi and Nicolau, have alleged. He has also noted that the intracutaneous response to vaccinia in the rabbit is entirely modified in degree and character or completely abolished if the virus is inoculated in conjunction with india ink of sufficient concentration. If a dermal site is infiltrated with ink, and virus is subsequently superposed on the same site, a naked-eye response may not follow. Indications have been obtained that infiltration of dermis with other material, e. g., *Streptococcus erysipelatis*, may also modify the reaction to a subsequently superposed virus. The mechanism of the inhibition is discussed, and particular stress laid on the action of ink in stimulating the local reticulo-endothelial system to proliferate, and thus enhancing the defense forces of the part.

Growing the Gonococcus.—The elements which McLeod et al. regard as essential to the growth of the gonococcus appear to be: (1) some source of aminonitrogen and of carbon; (2) salts such as are present in meat extract, and (3) a colloid that is capable of protecting the organism from undue concentrations of certain amino-acids and of enabling it to assimilate these and others. Blood heated between 60 and 100 C. has proved itself far superior to other colloids tried in this respect. A mixture of amino-acids, in which no single one is present in an inhibitory amount, produces inhibition of growth owing to summation of inhibitory effects, and in any case the gonococcus appears to be unable to utilize aminonitrogen unless a certain ratio of blood, or equivalent colloid, to aminonitrogen is maintained. The failure of the gonococcus to grow on ordinary nutrient agar would, in view of this conclusion, depend on an unduly low ratio of suitable colloid to aminonitrogen.

Excitation of Bactericidal Fluorescence.—These experiments reported on by Peacock and Whitby appear conclusive enough to justify a claim that bactericidal fluorescence is a possible therapeutic measure, and that though calcium phosphotungstate is far from being an ideal substance, yet its employment in superficial lesions may be found to be useful and practicable. Calcium phosphotungstate is a soluble substance emitting bactericidal wave lengths when excited by roentgen rays; it can be used subcutaneously in animals for bactericidal purposes.

Inhibition of Insulin Action by Toxemias.—A condition has been produced by Lawrence and Buckley in rabbits with diphtheria toxin in which (*a*) insulin action is reduced or absent; (*b*) a prelethal rise in blood sugar occurs, which has been reduced by ergotamine (femergin) and is therefore due to glycogenolysis, and (*c*) striking histologic changes have been found in the thyroid and suprarenal. The effect of toxemias and infections on these glands ("the thyroid-suprarenal apparatus") is discussed, and it appears that these glands are always stimulated by toxemias. It is suggested that the overactivity of these two glands, both physiologic antagonists to insulin, is the cause of the failure of insulin action during infections in diabetes. The effect of infections on the blood sugar in nondiabetes is also discussed. A number of insulin-resistant cases of diabetes, other than infected ones, are analyzed and most are clearly found to be complicated by an overactive thyroid or suprarenal. This theory of the overactivity and antagonism of the thyroid and suprarenal to insulin action during infections is discussed in its therapeutic aspects.

Determination of Arterial and Venous Blood Sugar.—Arterial and venous blood sugars do not parallel each other following glucose ingestion which, Rabinowitch says, may explain some of the discrepancies between the results of different workers in studying the renal threshold for sugar. It may also explain the fact frequently noted that many individuals, though not having typical renal glycosuria, have glycosuria following ingestion of glucose with no apparent hyperglycemia. Rabinowitch has found that the rates of glycolysis of diabetic bloods were less in venous than arterial specimens. The immediate practical application of arterial and venous blood sugar studies appears to be in the diagnosis and differentiation of the various types of diabetes, and results obtained along these lines are recorded.

Determination of Total Proteins in Cerebrospinal Fluid.—A colorimetric method of the determination of total protein content and that of the various protein fractions of cerebrospinal fluids is described by Hewitt. In normal fluid there is about 0.02 per cent albumin and about 0.003 per cent globulin, of which by far the greater part is pseudoglobulin. In pathologic fluids both albumin and globulin increase in quantity, and generally the globulin more in proportion. In fourteen normal and pathologic fluids the average ratio of albumin to globulin was 6:1; in three tabetic fluids the ratio was 3:1, and in sixteen general paralytic fluids it was 1.3:1. The significance of these differences is discussed.

British Journal of Radiology, London

32: 41-80 (Feb.) 1927

Roentgen-Ray Diagnosis of Pathologic Conditions of Gallbladder. J. F. Brailsford.—p. 41. (To be continued.)
Early Change in Nucleus of Cells of Tumors Following Exposure to β Radiation. J. C. Mottram.—p. 61.
Roentgenotherapy of 100 Cases of Exophthalmic Goiter. M. R. J. Hayes.—p. 64.
Training of Doctors for Roentgenology. G. Holszknecht.—p. 69.

British Medical Journal, London

1: 363-410 (Feb. 26) 1927

High Blood Pressure, Albuminuria, and Glycosuria in Relation to Life Insurance. G. L. Gulland.—p. 363.
*Mule Spinners' Cancer. A. H. Southam.—p. 366.
Acute Pancreatitis. H. Bailey.—p. 367.
*Arrest of Hemorrhage After Prostatectomy. R. O. Ward.—p. 370.
Aids to Palatal Sufficiency After Cleft Palate Operations. R. Woods.—p. 371.
*Right Branch Bundle Block. W. S. Malcolm.—p. 372.
*Tuberculosis and Milk. N. Raw.—p. 373.
Treatment of Tuberculosis: Colloidal Antimony. P. Moxey.—p. 374.
Treatment of Varicose Veins by Organic Arsenic Injections. W. M. Borcherds.—p. 375.
Aftertreatment of Mastoid Operations. A. J. Wright.—p. 375.
Pseudomucinous Cystadenoma of Ovary. R. R. Foote.—p. 375.

Mule Spinners' Cancer.—It is only within a very recent period that cancer of the scrotum and skin has come to be recognized as being associated with the occupation of mule spinning in cotton mills. Southam found recorded in government officers 667 cases, 570 in spinners and ninety-seven in ex-spinners who passed into other employment. Susceptibility to the irritant effects of mineral oil is said to be important in the etiology of this tumor.

Arresting Hemorrhage After Prostatectomy. — Ward describes a bag and clamp arrangement of his devising which is said to prevent hemorrhage after prostatectomy. The bag is slightly modified from Pilcher's pattern, and is mounted on part of a special clamp, one arm of which descends into the bladder; counterpressure is obtained by another part of the instrument ending in a small plate, which supports the area around the central point of the perineum. In this way two fixed points are obtained, and between them the rubber bag is held and there distended to the necessary amount. When once in position it is secure, and does not get out of place if the patient moves about and turns on to his side, or even on to his face.

Right Branch Bundle Block.—Three cases are reported by Malcolm. Two were in males. All had reached the degenerate period of life, with thickened arteries and high systolic and diastolic readings, and with symptoms indicative of cardiac insufficiency. The associated cardiac lesions were mitral, aortic (Wassermann reaction positive) and hypertrophic (with renal cirrhosis), the common factor being myocardial with degenerative arterial change.

Tuberculosis and Milk.—Raw is of the opinion that it is possible to immunize cattle against ordinary infection by using killed cultures of attenuated human tubercle bacilli, in precisely the same way that immunity can be given to man against ordinary infection of typhoid and paratyphoid by using dead cultures of typhoid bacilli.

1: 411-450 (March 5) 1927

Gastric Hemorrhage. C. Miller.—p. 411.
*Physiology of Monotony. R. J. S. McDowall and H. M. Wells.—p. 414.
*Carbon Monoxide Poisoning; Medicolegal Importance. D. J. A. Kerr.—p. 415.
*Bilharzia Ova and Test Tube. J. B. Christopherson.—p. 418.
*Oscillometric Examination of Arterial Permeability. A. P. Cawadias.—p. 419.
*Treatment of Burns. D. Mackenzie.—p. 421.
Treatment of Lethargic Encephalitis Associated with Parkinsonism by Ultraviolet Rays. R. Fawcitt.—p. 422.
Breathing Exercises with Moving Arms. H. Hill.—p. 422.
Coincident Herpes and Varicella. E. E. Ouseley-Smith and G. Williamson.—p. 423.
*Hereditary Hemorrhagic Telangiectasia. E. C. Mekie.—p. 423.
Pulmonary Embolism Following Childbirth. P. Henderson.—p. 423.
Excision of Protruding Portions of Liver. C. R. H. Tichborne.—p. 423.

Physiology of Monotony.—McDowall and Wells regard monotony as being an increasing important industrial problem. It is emphasized that a vascular reaction may be brought about by any form of stimulation or effort, actual or anticipated, provided the stimulus is not too often repeated. As soon as the stimulation or effort becomes monotonous, the vascular reactions are no longer obtained.

Carbon Monoxide Poisoning.—A study made by Kerr of the statistics of suicide in a large city has brought out many interesting facts. Among these are the changing methods adopted by persons who commit suicide. In former years the most frequent methods were hanging, drowning and cutthroat. Today the same methods, while still very common, no longer hold the first place, having given way to poisoning. The most frequent poison employed is carbon monoxide or coal gas, and in Scotland not only is it the most frequent poison but the most common of all methods of suicide. Indeed, the frequency of suicidal coal gas poisoning has become a question which demands serious consideration.

Effect of Antimony on Bilharzia Ova.—Christopherson asserts that in vitro experiments prove the direct toxic effect of antimony on the ova of bilharzia. They further suggest that the phenomenon of hatching of the bilharzia ova is a vital process, not governed exclusively by physical laws, for whereas antimony appears to have a profound effect on the live ovum, it apparently has no effect on the dead ovum. The action on the ova and on the adult parasite makes antimony the most valuable therapeutic agent in bilharziasis, and probably one of the most complete remedies in the therapeutic armamentarium.

Determination of Arterial Permeability.—The oscillometric examination of arterial permeability, Cawadias says, helps in determining whether obliteration exists, and thus in diagnosing whether a syndrome of intermittent claudication is due to an arterial obliteration or to a nervous cause (medullary intermittent claudication, a syndrome of the initial period of Erb's spastic paraplegia). The oscillometric method allows the course of the disease and the effect of treatment to be followed, and also enables a diagnosis to be made between arterial obliteration due to spasm and that due to definite organic obstacles. Oscillometric exploration allows the localization of the obliteration to be determined, the obturation curve being found precisely at the region of the obturation and under that region. Oscillometric estimations have been applied to the examination of the arterial circulation in cases of arterial and arteriovenous aneurysm by Cawadias. This method also shows whether a collateral circulation persists in a limb after extirpation of an arterial aneurysm, and will demonstrate the obliteration of a radial artery by an aortic aneurysm or by a tumor of the mediastinum. The involved artery will show the oscillometric curve of arterial obstruction.

Treatment of Burns.—The line of treatment advocated by Mackenzie is active surgical intervention, consisting in immediate removal of all dead tissues under a general anesthetic and the liberal use of Wright's hypertonic saline solution.

Hereditary Hemorrhagic Telangiectasia.—Mekie reports a case of an unusual hereditary condition of the venules and capillaries of the skin and mucous membranes. The man, aged 38, had advanced pulmonary tuberculosis. He gave a long history of recurring epistaxis. He had numerous telangiectases on the lips, which he stated had existed since he was about 15 years of age; they appeared one at a time, but all within two years of each other. Some years later similar spots appeared on the nose, cheeks, tongue, nasal septum, gums and soft palate. The spots were bright red and, except at certain times, were not palpable. They consisted of a cluster of dilated venules or capillaries, which lay immediately under the surface layer of the epithelium. The patient's grandfather, father, two of his uncles, one sister and three cousins had the same condition. The patient's seven children were not affected.

Journal of State Medicine, London

35: 63-124 (Feb.) 1927

Minimal Lethal Dose. W. W. C. Topley.—p. 63.
Rheumatism in Childhood. L. J. Llewellyn.—p. 89.
Primary Tuberculous Lung Focus in Childhood. R. G. Canti.—p. 104.
Year's Work of Postencephalitis Unit. G. A. Borthwick.—p. 111.

Journal of Tropical Medicine and Hygiene, London

30: 33-44 (Feb. 1) 1927

Neotropical Species of Tongue Worms: Human Porocephaliasis in Tropical America. G. O. M. Giglioli.—p. 33.

30: 45-56 (Feb. 15) 1927

Importance of Personal Study of Molluscum Bodies in Water. J. J. Clarke.—p. 45.
Early Diagnosis of Kala-Azar. G. C. Low and E. G. Sayers.—p. 46.
Early Microscopic Diagnosis of Leptospirae (Weil's Disease), Yellow Fever and Others. D. W. Schüffner and G. Sieburgh.—p. 48.

Lancet, London

1: 473-528 (March 5) 1927

Hematuria. W. G. Ball.—p. 473.
Surgery of Hernia. E. M. Cowell.—p. 478.
*Control of Scarlet Fever in Children's Hospital. D. McLean.—p. 483.
*Malarial Therapy in General Paralysis of Insane. J. P. Steel and J. E. Nicole.—p. 484.
*Nature of Thyrotoxic Myocarditis. J. S. Goodall and L. Rogers.—p. 486.
*Diabetes Insipidus in Lymphatic Leukemia of Aleukemic Type. J. H. Sheldon.—p. 489.
Multiple Aneurysms of Splenic Artery. J. A. Berry.—p. 490.
Cerebellar Abscess in Elderly Woman. W. S. Thacker-Neville.—p. 490.

Control of Scarlet Fever in Children's Hospital.—McLean reports good results in the control of scarlet fever from the use of the following procedure: (1) All the patients in the ward were given the Dick test as soon as was practicable. (2) The following day all Dick-positive children were given 5 cc. of scarlatinal antitoxic serum intramuscularly. (3) On the third day these positive children were retested, and if any were found to give a positive or doubtful reaction a further dose of serum was given. The procedure adopted in twenty-five wards containing from twenty to thirty patients suggests that the spread of the infection can be controlled. A second case of scarlet fever did not occur in any of the protected patients. No effects dangerous to the patient could be traced to the Dick test or serum injection, though, in a small minority of cases, the serum reaction was severe enough to cause pyrexia and some diarrhea extending over a few days.

Malaria Treatment of General Paralysis.—Although Steel and Nicole have not had as happy results with the malaria treatment of general paralysis of the insane as have been reported by other observers, they believe that it is distinctly worth while, as the patients become much more easily manageable. In fact, if the only improvement to be found was in their habits (which almost invariably become clean), the advantages accruing therefrom would be sufficient to warrant the work.

Thyrotoxic Myocarditis.—Goodall and Rogers assert that sustained thyrotoxicosis ultimately results in definite myocardial degeneration. A case in point is reported in detail.

Aleukemic Leukemia with Diabetes Insipidus.—A case of aleukemic leukemia is described by Sheldon in which there was general lymphocytic infiltration of the organs, but no typical blood changes. Death was preceded by a sudden attack of diabetes insipidus, with considerable daily variation in severity, and was associated with lymphocytic infiltration of the pituitary gland.

Bulletin de l'Académie de Médecine, Paris

97: 229-260 (Feb. 22) 1927

*Etiology and Pathogenesis of Pulmonary Gangrene. H. Vincent.—p. 232.
Vichy Waters in Treatment of Diabetes. M. Labbé.—p. 249.
Technic for Homoplastic Parabiosis. H. H. Goiriena.—p. 252.
Theory of Pathogenesis of Asthma: Treatment. P. Cantonnet.—p. 255.

Etiology and Pathogenesis of Pulmonary Gangrene.—Vincent asserts that in pulmonary gangrene, the rôle of *Bacillus fusiformis* is more important than that of *Spirochaeta vincenti*. Of four patients with gangrene or gangrenous abscess of the lung, he found spirochetes in three. In two their amount was insignificant; in the fourth, they were entirely absent. The spindle-shaped bacillus was present in all. The coexistence of streptococci, tubercle bacilli or syphilitic treponemes favors greatly the development of gangrene. Malnutrition, avitaminosis, anemia and diabetes are contributing factors, as is general anesthesia by ether or chloroform. The pathogenic micro-organisms come from the buccal cavity. The seat of the anaerobic spindle-shaped bacillus is in the center of the lesion, that of the aerobic spirochete is on the surface of the lesion. Total lack of air in the center of the lesion explains why expectoration in pulmonary gangrene is always fetid, while that in bronchospirochetosis is usually free from odor.

97: 261-284 (March 1) 1927

*Bronchial Lesions in Tertiary Syphilis. E. Sergent and R. Benda.—p. 262.
Cancer of Fourth Portion of Duodenum. V. Pauchet and Luquet.—p. 276.
Recrudescence of Sudden Deaths. Faure.—p. 280.
Experimental Insufficiency of the Liver. Rémond and Boulicaud.—p. 282.

Bronchial Lesions in "Tertiary Syphilis."—Sergent and Benda call attention to the fact that besides the large bronchi and the lungs, the smaller bronchi may be the location of syphilitic lesions. The presence of the latter is revealed by clinical signs and by roentgenograms. They describe eight cases of bronchial or peribronchial sclerosis obviously due to tertiary syphilis. In eight cases, the process could have developed from tuberculosis, as well as from syphilis. Bronchial syphilis should be differentiated from syphilitic bronchiectasis, which may accompany or rather follow the former. Sclerosis and gummas may be associated. Coexistence of tuberculosis is especially frequent.

Bulletins de la Société Médicale des Hôpitaux, Paris

51: 225-268 (March 3) 1927

*Cough in Cardiac Insufficiency. C. Lian and Gilbert-Dreyfus.—p. 225.
Therapeutic Value of Purified Diphtheria Antiserum. Lesné et al.—p. 235.
Suppuration of the Liver from Foreign Body. A. Lemierre and L. Pollet.—p. 241.
Malignant Lymphogranulomatosis with Intact Spleen. C. Aubertin and Destouches.—p. 245.
*Estimation of Biliary Acids in Duodenal Juice. M. Chiray and L. Cuny.—p. 253.
Influenza in the Course of Chronic Visceral Diseases. M. Renaud and C. Juge.—p. 261.
Influenza in the Elderly. M. Renaud and C. Juge.—p. 265.

Cough in Cardiac Insufficiency.—Lian and Gilbert-Dreyfus point out the fact that cough is frequently the only symptom in the beginning of cardiac insufficiency. In a third of the cases, the cough occurs when the patient is recumbent; in a sixth of the cases, it follows muscular effort. In some patients, cough appears during the night and in the morning; in others, after meals. Sometimes there are paroxysms of coughing, appearing every two or three minutes; they resemble the paroxysms of whooping cough. About 50 per cent of patients investigated by them were young; they presented cardiac lesions, chiefly those of the mitral valves. The others were about 50 years old; in these arterial hypertension was present. Auscultation of the respiratory tract does not usually reveal pathologic signs. The mechanism of this cough is explained by the presence of a passive edematous congestion in the lung, from abnormal diminution of the systole. The cough may subside on relieving the cardiac insufficiency. Administration of digitalis by the mouth is indicated.

Estimation of Biliary Acids in Duodenal Juice.—Chiray and Cuny give a detailed description of their method for measuring biliary acids in the duodenal juice obtained by a tube. Variations in concentration of biliary acids in A, B and C biles appeared to parallel the variations in biliary pigments. That the excretion of biliary acids is in inverse proportion to the excretion of cholesterol was not shown. The amount of biliary acids, so far estimated only in the B bile, was from 7 to 15 Gm. per liter.

Gynécologie et Obstétrique, Paris

14: 369-444 (Dec.) 1926

A Technic for High Forceps. J. C. Llames Massini.—p. 369.
*Atropine and Morphine in Rigidity of the Uterine Cervix. E. Toneff.—p. 384.
Radiotherapy of Cancer of the Uterine Cervix. S. Laborde and Y. L. Wickham.—p. 397.
Therapeutic Abortion from the Medical and Legal Standpoints. J. Hartemann.—p. 412.

Atropine Plus Morphine in Treatment of Spasmodic Rigidity.—Toneff reports, among others, ten cases of spasmodic contraction of the uterine cervix, in which atropine or belladonna combined with morphine were employed. The alkaloids were given by injection or by suppositories. The dose of atropine was 0.0005 Gm.; that of belladonna was from 0.06 to 0.09 Gm.; that of morphine, 0.02 or 0.03 Gm. These doses were given within four to six hours. Toxic phenomena on the part of the woman or of the fetus were never observed. Suppression of spasms, and consequently of rigidity in the uterine cervix, favored dilatation of the orifice, thus hastening the delivery. The usual obstetric interventions are indicated only after this treatment fails. Chloroform used in such cases did not exert an appreciable antispasmodic action.

Journal d'Urologie Médicale et Chirurgicale, Paris

22: 449-544 (Dec.) 1926

Leukoplakia of Urinary Tract. R. Allemann.—p. 449.
*Incontinence of Urine and Genital Diseases. Serrallach.—p. 471.
Acidogenic Bacillus in Urinary Infections. G. Cirillo.—p. 479.
Interrelation of Kidney and Appendix in Pathology. S. Rolando.—p. 482.
Polycystic Kidney in a Woman. G. Carajannopoulos.—p. 484.

Dribbling of Urine After Micturition.—Serrallach calls attention to patients in whom micturition is followed by a more or less prolonged dribbling of the urine. He found this disturbance to be pathognomonic for congestion of the spermatic organs. The condition favors particularly the spread of infection from the urethra to the genital organs.

Lyon Chirurgical

23: 681-804 (Nov.-Dec.) 1926

*Remote Results of Gastrectomy for Cancer. X. Delore et al.—p. 681.
Gastric Secretion with Gallstones. Operative Methods. E. Dahl-Iversen.—p. 743.
*Technic for Exposing the Stellate Ganglion. R. Leriche.—p. 763.

Remote Results of Gastrectomy for Cancer.—Delore, Mallet-Guy and Burlet's statistics are based on 239 cases of gastrectomy for cancer. The operative mortality was between 16 and 17 per cent. The percentage of deaths within the first year after the operation was 21; within the second and third years, 33 and 17, respectively. Recurrences were observed three and even six years after the operation. Those who have survived more than six years are considered as cured. They number fourteen. Two feel well and are carrying on their usual occupations thirteen and fifteen years after the operation. The prognosis of colloid cancer is graver than that of typical cancer.

Method for Exposing the Stellate Ganglion at Operation.—Leriche believes that the vertebral artery is the proper guide in finding the stellate ganglion. This ganglion is composed of the lower cervical and the first thoracic ganglions. The presence of the intermediate ganglion is almost constant. It is situated in front of the stellate ganglion and is sometimes mistaken for the latter; this fact may be responsible for the failure of some interventions. Leriche's incision is made between the two portions of the sternocleidomastoid muscle. It is oblique and measures 6 cm., estimating from the upper border of the clavicle. Details of the proceeding are given. This method applied in thirty-four operations proved to be more convenient than the usual one, in which the ganglion is sought for by following the sympathetic chain.

Paris Médical

63: 245-260 (March 12) 1927

Classification of Diseases. C. Achard.—p. 245.
*Essential Convulsions and Spasmophilia. G. Heuyer and J. Lonchampt.—p. 251.
Syndrome of Angina Pectoris in Mitral Stenosis. J. M. Pareja.—p. 256.

Essential Convulsions in Infancy and Spasmophilia.—Heuyer and Lonchampt sustain the theory that essential convulsions in infants are identical with epileptic convulsions in adults. Moreover, they do not find any difference between essential and symptomatic convulsions. They are caused by lesions of the central nervous system. The lesions are due to injury to the skull, infection or tumor of the brain. The rôle of the constitution is important, especially that of congenital syphilis. Syphilis was present in 49.3 per cent of infants with essential convulsions examined by the authors. It is possible that transient lesions in the organism, from disease, poisoning or changes in the blood serum are able to provoke convulsions. In essential convulsions the loss of consciousness is complete, in tetany consciousness is retained. Chvostek's sign is rarely elicited. It is not pathognomonic for tetany. The prognosis of essential convulsions depends on the gravity of the lesions. Of 300 children treated for nervous or mental disease, 133 had had convulsions in the past. The authors did not obtain positive results from calcium chloride or ultraviolet rays. In dubious cases, antisyphilitic treatment should be instituted and continued over a long period.

Presse Médicale, Paris

35: 273-288 (March 2) 1927

*Hematuria with Urethral Stenosis. J. Duvergey and L. Dax.—p. 273.
*Constitution and Hemorrhages in Typhoid. P. Emile-Weil and R. Lévy.—p. 274.
Case of Osteomalacia in a Man. E. Chabrol et al.—p. 275.
*Procaine Hydrochloride in Perineal Anesthesia. S. E. Risacher and R. Waitz.—p. 277.

Hematuria from Urethral Stenosis.—In one of Duvergey and Dax's cases of urethral stenosis, hematuria occurred intermittently during two years; in five others, it was continuous during a few weeks or months. The appearance of blood in the urine was usually spontaneous, sometimes following a transient retention. In all these cases, operation or cystoscopic examination revealed congestive or ulcerous lesions in the bladder. While mere dilatation of the urethra may suffice in some cases, in others internal urethrotomy or cystostomy are required.

Pathogenesis of Intestinal Hemorrhages in Typhoid.—Emile-Weil and Lévy found that intestinal hemorrhages occurring in typhoid are not exclusively of local origin. The anamnesis and examination of the patients' blood testified to the fact that the hemorrhage is one of the signs of a hemophilo-hemogenetic syndrome. The syndrome may be constitutional or may be acquired in the course of the disease. In typhoid, thrombopenia and involvement of the spleen, bone marrow and liver explain the pathogenesis of the hemophilo-hemogenetic syndrome. The aim of the treatment should be to accelerate coagulation of the blood rather than to enhance vasoconstriction. In typhoid patients with a hemorrhagic diathesis, intestinal hemorrhages may be averted by injections of blood. About 20 cc. of blood from a healthy person is injected subcutaneously, or intravenous transfusions are given. Injection of 300 cc. of blood arrested intestinal hemorrhage.

Procaine Hydrochloride in Spinal Anesthesia Limited to the Perineal Region.—Risacher and Waitz use a 50 per cent solution of procaine. A drop of this hypertonic solution introduced into the subarachnoid space immediately reaches the bottom of the dural culdesac, where it causes a local anesthesia, in which the caudal roots are involved. Anesthesia of the genital, perineal and anal region is thus obtained. The lumbar injection is given with a fine syringe needle, preferably at the level of the iliac crests, with the patient sitting. The injection may or may not be preceded by withdrawal of cerebrospinal fluid. Anesthesia is complete in five minutes. The anteroposterior limits of the anesthetized region are the anterior part of the vulva and the sacrum; laterally the anesthesia extends beyond the limits of the perineum; in depth it reaches as far as the uterine cervix. It lasts from an hour and a half to two hours. It does not influence the uterine contractions, but pain is abolished. This method of anesthesia was used in seventy cases of forceps, embryotomy, extraction by the breech, version, delivery and perineorrhaphy. The method can be advantageously employed in minor gynecologic operations. There were never any by-effects. Assistance is not required.

35: 289-304 (March 5) 1927

*Remote Complications of Injury to the Skull. M. Villaret and J. Bailby.—p. 289.
*Pathogenesis of Serum Accidents. V. de Lavergne.—p. 290.
Colipyuria and Deformities of the Urinary Tract in Infants. P. F. Armand-Delille and M. Bespaloff.—p. 293.

Fate of Patients with Injury to the Skull.—Villaret and Bailby's statistics include 500 patients reexamined ten or twelve years after an injury to the skull. Aggravation of the initial condition was observed in 26 per cent. It was connected with the presence of a subdural hematoma or with loss of cerebral tissue. The tardy complications were represented chiefly by epilepsy, spastic or flaccid paralysis, mental derangement or visual disturbances. Tardy development of an abscess in the brain caused death in 1.34 per cent.

Pathogenesis of Serum Phenomena.—In Lavergne's opinion, shock occurring immediately after a second injection of serum and serum disease following a single injection in from eight to twelve days are both phenomena of anaphylaxis. In man the first injection of serum is at the same time preparatory and provocative. It is preparatory owing to the sensitization induced; it can be provocative as long as the foreign protein persists in the organism, namely from eight to twelve days. A second injection of serum accelerates the appearance of anaphylactic phenomena.

Revue de Chirurgie, Paris

45: 549-617, 1926

Displacement of Foot in Fractures of the Ankle. P. Bohème.—p. 549.
*Study of the Thymus: Its Rôle in Surgery. H. Godard.—p. 563.
Ligation of Common Carotid in Pulsating Exophthalmos. E. de Peyrelongue and F. Baur.—p. 595.
Amebic Tumors of the Large Intestine. E. P. Lasnier.—p. 603.

Study of the Thymus; Rôle of the Organ in Surgery.—Godard sustains the theory that involution of the thymus starts at the period of puberty; it continues until the age of 25. Remnants can be found in very old persons. He describes the anatomy, histology and physiology of the organ, which is considered an endocrine gland. The therapeutic use of thymic extracts and grafts is discussed. Tumors of the thymus are studied, as well as the connection between its enlargement and syncope or death during anesthesia.

Revue Française de Pédiatrie, Paris

2: 687-834 (Dec.) 1926

The Sympathetic System in Infants. J. Minet et al.—p. 687.
*Primary Acidosis in Infants. C. Torres Umaña.—p. 717.
Merbaphen Test in Young Children. R. Baranski and M. Bussel.—p. 736.
*Estimation of Lactic Secretion in Nursing Women. T. Abramson.—p. 758.
Rare Complications of Typhoid. V. Mikulowski.—p. 764.
Cardiovascular Diseases in Children. E. Lesné and G. Dreyfus-Sée.—p. 774.

Pathogenesis of Primary Acidosis in Infants.—Torres Umaña observed primary acidosis most frequently in children under 2 years. Uncontrollable vomiting and depression are the prevailing clinical manifestations of the disease, ending frequently in death. Increased acidity of the body fluids with increase of urinary ammonia and amino-acids is associated with decreased alkalinity of the blood. The coexistence of acetonemia creates a condition of acute diabetes. A transient factor, such as an infection of intestinal or of external origin, may be to blame. A radical treatment for infantile acidosis is so far unknown.

Estimation of Secretion of Milk in Nursing Mothers.—In 188 nursing women, Abramson measured the temperature in the axilla and under the breast. In women whose milk sufficed for the babies' normal growth, the temperature under

the breasts was higher than that in the axillae, by from 0.2 to 1.8 C. In women with arrested lactation, both temperatures were equal. In mothers who had milk in one breast, while in the other the secretion was impaired, the temperature was higher under the functioning breast than under the other. In women with a febrile disease, the difference of the temperatures was less clearly manifest. A comparison of the two temperatures may help in determining whether the functioning of the breasts is or is not sufficient for the infant's needs.

Schweizerische medizinische Wochenschrift, Basel

57: 169-192 (Feb. 19) 1927

*Direct and Indirect Phototherapy of Rickets. E. Wieland.—p. 169.
Radiographic Symptom of Aneurysm of the Left Auricle. I. Mahaim. —p. 183.

57: 193-216 (Feb. 26) 1927

Fracture of the Metacarpus. O. Winterstein.—p. 193.
Electrically Heated Laryngeal Mirrors. J. Stephani.—p. 210.

Direct and Indirect Phototherapy of Rickets.—Wieland found that ultraviolet light or irradiated milk powder cures the bone changes in rickets, but is without influence on the anemia. A mixed diet containing not more than one tenth of the body weight of irradiated milk (in older children not over one-half liter) with added iron is recommended.

Policlinico, Rome

34: 271-306 (Feb. 21) 1927

Diagnosis of Appendicitis. G. Gucci.—p. 271.
Hematuria in Appendicitis. E. Fronticelli.—p. 275.
"Surgery of Pulmonary Tuberculosis." N. Leotta.—p. 276.

Riforma Medica, Naples

43: 169-192 (Feb. 21) 1927

Influenzal Meningitis. R. Silvestrini.—p. 169.
*Agglutinin Titer and Glycemia. E. Periti.—p. 171.
Genitodystrophic Geroderma. E. Mariotti.—p. 174.
Diathermy. M. Sorrentino.—p. 178.
Microscopic Examination of Feces. G. Moretti.—p. 186.

Agglutinin Titer and Glycemia.—Periti found that addition of 0.08 per cent of dextrose to the physiologic solution used for dilutions increases the agglutinating potency of the serum without decreasing its specificity. With this method the agglutinins may be found earlier in the course of the disease than with the classic method.

Rivista di Clinica Pediatrica, Florence

25: 73-144 (Feb.) 1927

Skin Necrosis from Diphtheria. M. Pergola.—p. 73.
Facial Phenomenon in School Children. E. De Micheli.—p. 97.

Medicina Ibera, Madrid

1: 289-316 (March 12) 1927

*Postvaccinal Encephalitis. F. J. Ontiveros and J. D'Harcourt.—p. 289.
Treatment of Cystitis. F. Sarasua and A. Peña.—p. 293.

Vaccination and Encephalitis.—Postvaccinal encephalitis has not, so far, occurred in Spain. In revaccinating several groups of soldiers, Ontiveros and D'Harcourt used large doses of a very potent smallpox virus and extensive scarifications. Specific allergic reactions developed rather uniformly, but without the slightest nervous symptom. About 3,000 recruits were inoculated against typhoid from twelve days to four months after being vaccinated. No nervous phenomena appeared, save tremors in patients who had suffered from that condition since childhood. Postvaccinal encephalitis must, they hold, be caused by a preexistent virus, activated by the vaccine.

Prensa Médica Argentina, Buenos Aires

13: 853-896 (Feb. 20) 1927

Periarterial Sympathectomy in Volkmann's Ischemic Contracture. A. Ceballos and J. A. Caeiro.—p. 853.
Juvenile Spasmodic Astereognosis. M. R. Castex and A. F. Camauër. —p. 860.
*Survival of Tissues After Death. A. H. Roffo.—p. 873.

Survival of Tissues After Death.—Roffo's experiments show that both embryonic tissues and tissues of newly hatched chickens develop perfectly, even for as long as ten days after the death of the animal. Spleen and heart tissues survive longer than the skin. Ten days after slaughtering an animal, heart beats are still visible. If this property can be extended to other structures, such as nervous tissue, any number of biologic questions may come up; for instance, when does a person actually die?

Revista Esp. de Urología y Dermatología, Madrid

28: 621-674 (Dec.) 1926

*Treatment of Syphilis by Mouth. M. Garriga.—p. 621.

Treatment of Syphilis by Mouth.—In the exceptional cases in which arsphenamine cannot be used in early syphilis the pentavalent arsinic acids may be given by mouth. The best of these drugs is meta-amino-para-oxy-phenyl-arsinic acid. The dose is 2 cc. per kilogram of body weight. When it is combined with bismuth, the result is even better. Meta-amino-para-oxy-phenyl-arsinic acid may be used with advantage in latent syphilis, in pregnancy and in children.

Revista de Especialidades, Buenos Aires

1: 181-453 (Aug.) 1926. Partial Index

Reticular Scar Tissue in the Palpebral Conjunctiva. J. Lijó Pavía and M. Dusseldorp.—p. 181.
Hydatid Cysts of the Orbit in Uruguay. A. V. Barriére.—p. 196.
Keratoconus and Abderhalden's Test. A. Natale.—p. 210.
*Roentgen Rays in the Treatment of Interstitial Keratitis. E. de la Vega. —p. 225.
Viewing the Interior of the Eye. E. P. Fortín.—p. 238.
Mikulicz' Syndrome. C. C. Damel.—p. 251.
Blood Pressure in the Capillaries of the Retina. E. Lida and E. Adrogué. —p. 264.
Parinaud's Conjunctivitis. R. Argañaráz and J. Lijó Pavia.—p. 276.
Atypical Congenital Muscular Strabismus. E. Adrogué.—p. 292.
Spontaneous Arterio-Venous Aneurysm. A. Tiscornia and A. Crocco. —p. 304.
Resorption of Masses of the Transparent Lens in the Anterior Chamber. J. Lijó Pavía.—p. 317.
Case of Sarcoma of the Orbit. B. Courtis.—p. 324.
*Treatment of Trachoma with Abadie's Electric Cautery. M. Dusseldorp. —p. 346.
American Leishmaniasis of the Skin with Eye, Nose, Mouth and Throat Complications. F. Belgeri and M. Dusseldorp.—p. 372.
Brown-Séquard's Syndrome Caused by Shock and Traumatic Hematomyelia. M. Alurralde and M. J. Sepich.—p. 383.
*Spinal Fluid Change After Malarial Therapy of General Paralysis. G. Bosch and A. Mó.—p. 426.
Spontaneous Extraperitoneal Rupture of Kidney with Uronephrosis. E. Castaño.—p. 431.

Roentgen Rays in Interstitial Keratitis.—In four cases of interstitial keratitis, de la Vega tried roentgen rays with excellent results. The results were better and quicker in the two cases in which treatment was started early. With keratitis of doubtful origin the effects are less certain; children with tuberculosis of the glands seem to receive the least benefit. The roentgen-ray therapy must be combined with general treatment. The dose was 30 per cent of the erythema dose, filtered through 2 mm. of aluminum and applied once in three weeks till from four to six doses had been given.

Electric Cautery in Trachoma.—In twenty-two patients with trachoma, Dusseldorp tried Abadie's method of cauterization. Seventy per cent improved promptly. The symptoms most amenable are: tarsitis, corneal ulcer, subjective discomfort, pannus, ptosis and conjunctival changes. The usual methods of treating the conjunctiva must be continued.

Spinal Fluid Change After Malarial Therapy.—Bosch and Mó report cases of general paralysis treated with malaria. The Wassermann and the globulin tests changed from frankly positive to negative. The clinical condition also improved greatly.

Semana Médica, Buenos Aires

34: 321-384 (Feb. 10) 1927. Partial Index

Syphilitic Chronic Gastritis. J. R. Goyena.—p. 321.
Colles' Fracture. R. Finochietto.—p. 324.
*The Blood of the New-Born. F. A. Deluca.—p. 337.
Closure Without Drainage in General Peritonitis. H. Dionisi.—p. 350.
Hookworm Disease. I. C. Odena.—p. 356.
Adenosarcoma of the Kidney in an Infant. F. Pozzo and A. E. Bianchi. —p. 369.
Parasites in Edible Fish. E. J. MacDonagh.—p. 373.

Characteristics of the Blood in the New-Born.—Deluca performed forty-eight blood examinations on twenty-four

new-born babies. In four the blood was taken from the cord, in the rest it was withdrawn from a few hours to twenty-one days after birth. Polycythemia is usual; the lowest number of erythrocytes found was 5,260,000 per cubic millimeter. The maximum was 8,250,000 and in the majority of cases the number lay between 6,500,000 and 7,000,000. The hemoglobin went as high as 160 per cent and only twice fell below 100. There were from 485 to 2,028 erythrocytes to each leukocyte. The color index was in sixteen cases above 1; in sixteen, from 0.90 to 1; in seven, from 0.80 to 0.90; in three, from 0.70 to 0.80; in two, from 0.60 to 0.70. The often quoted hyperleukocytosis of the new-born was never found. The highest leukocyte count was 12,400 per centimeter. On the other hand, leukopenia was frequent. Lymphocytes presented both absolute and relative increase and neutrophils the opposite. Eosinophils exhibited absolute and relative increase, but not regularly. Rieder's cells were found three times, and Türck's once.

Siglo Médico, Madrid

74: 293-320 (March 12) 1927

Biomicrostereoscopic Study of the Iridocorneal Angle. A. Castresana.—p. 293. C'td.
*Acriflavine in Gonorrheal Arthritis. A. Pulido Martín.—p. 296.

Acriflavine in Gonorrheal Arthritis.—After other treatment had failed, Pulido treated fifteen patients with gonorrheal arthritis and polyarthritis by intravenous injection of 2 per cent acriflavine. All were cured.

Archiv für Dermatologie und Syphilis, Berlin

152: 529-778 (Dec. 31) 1926

*Constituents of Tar That Produce Carcinoma. B. Bloch and F. E. Widmer.—p. 529.
Recurrence of Fungous Diseases of the Scalp After Roentgen-Ray Treatment. E. Muskatblüt and N. Tschernogubow.—p. 544.
*The Optimal Arsphenamine Dose. S. Bogdanow.—p. 562.
A Symmetrical Syphilitic Leukoderma. I. Kliorin.—p. 568.
*Genesis of Xanthoma. F. Herrmann and E. Nathan.—p. 575.
Papilliform Syringocystadenoma. H. Biberstein.—p. 602.
Posterity of Patients with Neurofibromatosis. G. A. Fischer.—p. 611.
*Turpentine Dermatitis. A. Perutz.—p. 617.
*Blood Sugar in Skin Diseases. M. Loeb.—p. 653.
Action of Antisyphilitic Drugs. S. Somogyi.—p. 660.
Filtrable Herpes Virus. S. Minami and I. Ehara.—p. 664.
Herpes Zoster Generalisatus—Herpes Zoster Varicellosus. F. Hinze.—p. 670.
Neurodermatitis and Neuroderma. C. Kreibich.—p. 672.
Two Cases of Cancroid. C. Kreibich.—p. 679.
*Carcinosis Cutis. W. L. L. Carol.—p. 684.
Generalized Syphilis in the Rabbit. P. Uhlenhuth and H. Grossmann.—p. 708.
Trypanosomal Disease of the Rabbit as Model of Syphilis. A. Stühmer.—p. 738.
Fatal Poikilodermia Atrophicans Vascularis (Jacobi). H. Mierzecki.—p. 751.
Atrophying Follicular Keratoses. M. Lang.—p. 756.
*Etiology of Eczema in Infants. F. Rosenbund and A. Meyerstein.—p. 772.

Constituents of Tar Active in Producing Experimental Carcinoma.—Bloch and Widmer found that distillates of tar obtained at temperatures below 230 C. (under a pressure of 1.15 mm.) did not produce cancer in mice; between 230 and 250 C., the cancer producing activity was slight. In those obtained at temperatures above 250 C., it was stronger than in raw tar or in the total distillate. The greatest activity was found in tar distilled over at temperatures between 275 and 284 C. The residuum contained little of the active material. It appears that the carcinogenous activity of tar resides not in one but in a number of substances. These substances do not contain nitrogen, sulphur or arsenic compounds. It is probable that they are cyclic hydrocarbons of unknown nature, possessing a high molecular weight.

The Optimal Dose of Neoarsphenamine.—In a series of ten patients, Bogdanow found that 5.1 Gm. of neoarsphenamine was the average quantity required to convert a positive into a negative Wassermann reaction, when the drug was given in doses of 0.3 Gm. three times a week; whereas an average of 6.6 Gm. was necessary in a comparable series of patients, to whom 0.9 Gm. was administered once a week.

Genesis of Xanthoma.—In two cases, one of xanthoma juvenile multiplex localisatum, the other of xanthoma juvenile multiplex dissemination, the serum cholesterol was investigated from the physical and chemical standpoints. In the first case, there was neither an increase in the total cholesterol nor marked direct precipitation of cholesterol. In the second, on the other hand, the cholesterol index was very high and an absolutely and relatively large part of the cholesterol could be directly precipitated.

Turpentine Dermatitis.—This article contains a study of the clinical picture, pathogenesis and treatment of the occupational dermatitis of workers in paints, polishes, shellacs, etc., particularly from the standpoint of its allergic nature. It appears probable, from Perutz's experiments, that skin allergic to turpentine is hypersensitive only to unsaturated terpenes, and does not react to saturated terpene hydrocarbons. A disturbance in the vagosympathetic equilibrium can be demonstrated, in the sense of exaggerated vagal excitability. Whether this is a predisposing factor or a result of the cutaneous hypersensitiveness is not known. Examinations of the blood and pharmacodynamic studies of the skin confirm the observation of a preponderance of the parasympathetic over the sympathetic function. Therapeutically, blocking the parasympathetic with atropine or augmenting the excitability of the sympathetic with epinephrine and ephedrine is suggested, in addition to desensitizing treatment.

Blood Sugar in Skin Diseases.—In a material of 462 cases, Loeb found an absolute increase in the blood sugar in dermatitis intertriginosa, a tendency to general increase in furunculosis, distinct hypoglycemia in asthma, in late exudative eczematoid and in exudative infants. In individual cases of other skin diseases also, he found the blood sugar increased. The hypoglycemia in the conditions mentioned may be regarded as a symptom of an existing vagotonia.

Bowen's "Precancerous Dermatosis."—Carol presents a detailed histologic study of a case of carcinosis cutis of a peculiar type. It occupies a position between basal cell carcinoma and squamous cell epithelioma. It differs from the first by great irregularity of structure, from the second by the slight importance of epithelial pearls in the histologic picture. The atypical mitoses and the atypical large cells are characteristic features and more in evidence than the phenomena of dyskeratosis. Precancerous dermatosis seems to Carol an incorrect designation, carcinosis cutis multiformis (verrucosa) might be preferable.

Etiology of Eczema in Infants.—In their experiments on infants Rosenbund and Meyerstein found that application of stool or urine to healthy skin resulted in many cases in a lesion apparently identical with infantile eczema. The stools and urines of children with eczema or neurodermatitis acted more powerfully in this respect than those of children with healthy skin, and the skin of eczematous children responded to the irritation more frequently and more intensely than did that of children without a skin lesion. The nature of the irritative substances in the stool and urine could not be ascertained.

Beiträge zur klinischen Chirurgie, Berlin

138: 391-582, 1926

Payr's Pyloromyotomy. E. Steden.—p. 391.
*Palliative Resection for Ulcer. H. Schomberg.—p. 395.
Surgical Treatment of Recurrent Dislocation of the Shoulder. E. Logen.—p. 401.
*Typhoid Spine. G. Haselhorst.—p. 417.
Lumbosacral Spondylolisthesis. W. Jaroschy.—p. 428.
*Surgical Treatment of Injury to the Recurrent Laryngeal Nerve. O. M. Chiari and W. Stupka.—p. 461.
*Diagnosis and Treatment of Subphrenic Abscess. W. Graf.—p. 483.
Disease of Sesamoid Bones of the First Metatarsal. W. Müller.—p. 494.
Chronic Intussusception in Childhood. W. Birkenfeld.—p. 521.
Fracture of the Spine in Tetany. W. Bäcker.—p. 555.
The Duodenal Sound in Surgery. F. Dietel.—p. 559.

Palliative Resection for Nonresectable Ulcer.—In Finsterer's "resection for exclusion," the ulcer itself is left, the antrum and part of the body of the stomach, in some cases also the pylorus and a narrow cuff of duodenum, are resected. In Flörcken's clinic four cases of gastric ulcer were operated on by this method. From two to four years later three of the patients reported themselves as entirely well, the fourth was much improved. The method was used in forty patients with duodenal ulcer. In eight there were multiple ulcers of

the anterior and posterior walls, in five the ulcer had penetrated into the pancreas, twice there was callous ulcer with cholelithiasis, in twenty-five cases the ulcers were deep seated or had caused extensive induration in the hepatoduodenal ligament or adhesion between the duodenum and the lower surface of the liver. Eight of these patients could not be traced, so that late results were obtained in only thirty-two cases. Three per cent died, 8 per cent were unimproved, 13 per cent improved and 76 per cent cured.

Typhoid Spine.—Haselhorst describes a typical case. The changes in the spine were followed in roentgenograms taken every four weeks for three months and again at the end of two and four months. Lateral as well as postero-anterior exposures were made and are reproduced.

Injury to the Recurrent Laryngeal Nerve.—Operation for goiter had resulted in paresis of the region of supply of the recurrent laryngeal nerve on both sides. Phonation was possible with the aid of the left recurrent nerve only. Chiari and Stupka planned neurotization of the posticus muscle of the right side. The neurotization did not succeed, but by the plastic operation a permanent widening of the glottis, from traction, was achieved, with the result that the patient was restored to health and working ability.

Diagnosis and Treatment of Subphrenic Abscess.—Graf discusses the danger of infecting the pleural cavity in making trial punctures for the location of an abscess that has burrowed upward into the vicinity of the costodiaphragmatic sinus. He has worked out a method to avoid this danger. By resecting the tenth and eleventh ribs (or more), the diaphragmatic musculature in the prediaphragmatic space is exposed; the sinus is pressed upward, and, after caring for the nerves and vessels of the region, puncture is made through the exposed diaphragm.

Deutsche medizinische Wochenschrift, Berlin

53: 265-306 (Feb. 11) 1927

*Chemotherapy of Syphilis in Rabbits. P. Uhlenhuth and H. Grossmann. —p. 265.
*Serodiagnosis of Tuberculosis. L. Rabinowitsch-Kempner.—p. 267.
Blood Sedimentation. M. Bönniger.—p. 269.
Recovery from Acute Myeloneuritis. G. L. Dreyfus.—p. 270.
Occult Bleeding. K. Hille.—p. 273.
Determination of Pepsin. K. F. Franke.—p. 275.
Albuminuria in Adolescents. F. Hoppe.—p. 276.
*"Sanocrysin" Treatment. T. Madsen and J. R. Mörch.—p. 277.
Determination of Residual Nitrogen. W. Seidel.—p. 278.
Compression Myelitis and Acute Poliomyelitis. E. Siemerling.—p. 280.
*Sugar Treatment in Tonsillitis and Diphtheria. E. Koenigsberger and S. Mussliner.—p. 282.
*Treatment of Oxyuriasis with Sulphur. Nottebaum.—p. 283.
Structure and Function of Cell Membranes. R. Mond.—p. 283.
Medical Statistics in the United States. F. Prinzing.—p. 285.
Accident and Sickness Insurance. Reckzeh.—p. 286.
Modelling in Teaching Anatomy. Brodersen.—p. 287.
Quackery and Medical Science. Goldscheider.—p. 289. C'td.
Milk Supply. E. Loewy.—p. 302.

Chemotherapy of Syphilis in Rabbits.—Uhlenhuth and Grossmann believe that a negative result of reinfection does not exclude the possibility that the animal has been cured. They prefer to inoculate an emulsion from the organs of such an animal. If the latter method of control of the chemotherapeutic results is used, it seems that it is possible to cure completely grave, generalized syphilis in rabbits.

Serodiagnosis of Tuberculosis. — Rabinowitsch-Kempner obtained identical results in a large series of tests made with Besredka's antigen and technic and with the simplified technic and antigen of Neuberg and Klopstock. She concludes that the latter method constitutes decided progress in serodiagnosis of tuberculosis.

"Sanocrysin" Treatment.—Madsen and Mörch had good results in experimental tuberculosis in rabbits. In tuberculosis of low virulence, small doses and addition of serum were necessary. Intolerance was frequent. Virulent tuberculosis required large doses of the drug, and these doses were well tolerated.

Sugar Treatment in Tonsillitis and Diphtheria.—Koenigsberger and Mussliner recommend local application of powdered sugar or a strong (30 to 40 per cent) solution of sugar in treatment of diphtheria of the nose, tonsillitis and Vincent's angina.

Treatment of Oxyuriasis.—Nottebaum confirms the good results obtained with sulphur in oxyuriasis. He recommends a mixture of equal parts of precipitated sulphur and compound powder of licorice. Children are given a small amount three times daily after meals for eight days; adults, about a teaspoonful. The amount should be large enough to cause mushy stools. The treatment may be repeated after a week. The hands must be kept clean and the anal region should be treated with a 5 per cent calomel ointment.

53: 307-348 (Feb. 18) 1927

Functional Disturbances of Blood Vessels. H. Schlesinger.—p. 307.
Hemorrhagic Aleukia. H. Ellmer.—p. 310.
Interfereometric Prediction of Sex. A. Streck.—p. 312.
Serotherapy of Scarlet Fever. H. Lenthe.—p. 313.
Standardization of Vitamin Preparations. W. Gehlen.—p. 316.
*Elective Action of Ultraviolet and Radium Rays. J. Seide.—p. 317.
Electrocardiogram in Myxedema. Lueg.—p. 319.
Blood Urea and Indican. M. Szour.—p. 319.
Meningococcus or Gonococcus Sepsis? A. Jacoby and H. Cohn.—p. 320.
Stage of Retraction in Exudative Pleurisy. S. Kirković.—p. 320.
Disinfection of the Skin. P. Seeliger.—p. 321.
Milk in Dermatology. C. Bruck.—p. 322.
Hypernephroma with Gynecomasty. J. P. zum Busch.—p. 323.
Venesection in Prevention of Hemorrhages into the Vitreous Body. C. Hamburger.—p. 323.
Biologic Reactions in Echinococcus Disease. G. Remé.—p. 324.
*Stomach Tube in the Feeding of Children with Bronchopneumonia. A. Reiche.—p. 325.
New Microsedimentation Test. G. Haselhorst.—p. 325.
Idem. H. Poindecker.—p. 326.
A New Vaginal Speculum for Operations. E. Guttmann.—p. 326.
Substitute for Dark Room. W. Kirschstein.—p. 327.
Roentgen-Ray Study of Female Genital Organs. R. Zimmermann.—p. 327. C'td.
The Law and Venereal Diseases. Editorial.—p. 328.

Elective Action of Ultraviolet and Radium Rays.—Seide irradiated Hydatina senta (rotifers), which from parthenogenetic ova at short intervals. When he used radium, the ova were injured and the helminths survived—just as postulated by the Bergonié-Tribondeau law. On the other hand, ultraviolet rays killed the animals, while the ova developed. This confirms Ruppert's observations.

Stomach Tube in Feeding Children with Bronchopneumonia.—In children with complete lack of appetite Reiche had good results from forced feeding with a stomach tube. He warns against the use of the stomach tube in bronchopneumonia. It excites the patient too much and probably impairs the prognosis.

Klinische Wochenschrift, Berlin

6: 289-336 (Feb. 12) 1927

Albuminuria. T. Geill.—p. 289.
Latent Syphilitic Infection in Rabbits. P. Uhlenhuth and H. Grossmann. —p. 292.
*Circulatory Insufficiency in Diabetes. H. Strauss.—p. 296.
Experimental Tuberculosis and Trichophytosis. H. Martenstein and K. G. Ledermann.—p. 299.
Reactivation of Tuberculous Foci. A. Arnstein.—p. 302.
*Serologic Test for Blood Group O. F. Schiff.—p. 303.
Toxic Action of Hydrogen Nitrid. R. Stern—p. 304.
*Blood Transfusions in Sepsis in Children. W. Reimold and B. Kramer. —p. 305.
*Variability and Action of Enzymes. H. W. Bansi and H. Ucko.—p. 309.
pH and the Wassermann Reaction. C. Stern.—p. 310.
Intravenous Injections in Guinea-Pigs. G. Bakács.—p. 311.
"Treatment of Staphylomycoses." T. Benedek.—p. 312.
Cholera Toxin. M. Hahn and J. Hirsch.—p. 312.
*Phlorhizin Diabetes. S. Dietrich and O. Loewi.—p. 313.
*Alimentary Hyperglycemia. H. Häusler and O. Loewi.—p. 313.
Digestion of Fat in Infants. E. Freudenberg.—p. 313.
Chronic Hemorrhagic Diathesis in Essential Thrombopenia. G. D. Koehler.—p. 314.
Physical Therapy in Chronic Arthritis. A. Laqueur.—p. 315.
Physical Chemistry and Dermatology. A. M. Memmesheimer.—p. 319.

Circulatory Insufficiency in Diabetes.—Strauss observed during the war that many diabetic patients died in the precomatose condition from failure of the circulation. He suggested the possibility of exhaustion of the suprarenals. He has recently seen similar conditions in patients who were under insulin treatment, and came to the conclusion that insulin may change the *finale* of diabetes by substituting

insufficiency of the heart for true coma. He had good results with insulin in precomatose conditions, but only two out of six patients with fully developed coma recovered. Other authors have confirmed his observations on this circulatory failure. He does not believe with Lorant that it occurs only in the "sthenic" (high blood pressure) type of diabetes. Excitants and cardiacs (caffeine, strychnine, digitalis and epinephrine) are indicated in patients with circulatory insufficiency.

Serologic Test for Blood Group O.—Schiff mixed beef serum with human blood corpuscles of group IV Jansky (AB). After this, the serum agglutinated electively human erythrocytes of group I (O). This speaks for the existence of a true antigen in corpuscles of this group—not for a mere absence of antigens A and B. Blood corpuscles of groups II (A) and III (B) were not agglutinated by this serum, although, according to Bernstein's theory, which has been confirmed by the results of investigations on heredity, some of them probably contain antigen O. He found, however, that some of these corpuscles bind the agglutinin for the O substance.

Blood Transfusions in Sepsis in Children.—Reimold and Kramer report excellent results with daily transfusions of citrated blood in children with septic affections. The amount was small in infants (20 to 30 cc. of blood), larger in older children. The injections were repeated during several days.

Variability and Action of Enzymes.—Bansi and Ucko's experiments on the action of a peroxidase on different substances (pyrogallol, guaiacol and cresol) show that the optimum of hydrogen ion concentration varies with the substratum. Therefore, the same enzyme at the same hydrogen ion concentration may accelerate one reaction and at the same time inhibit another.

Phlorhizin Diabetes.—Dietrich and Loewi found that the absorption of dextrose by erythrocytes is inhibited in a blood plasma to which phlorhizin has been added or which was taken from an animal injected with phlorhizin. Insulin counteracts this phenomenon. The liver perfused by such plasma does not accept dextrose, but it does not lose dextrose. The latter feature is different from the action of plasma from patients with hyperglycemic diabetes.

Alimentary Hyperglycemia.—Häusler and Loewi found that administration of glucose by mouth or subcutaneously is followed by an increased absorption capacity of erythrocytes for dextrose. They attribute it to an overproduction of insulin, which may be inhibited by atropine. Atropinization reveals, besides this, an inhibition of the absorption of dextrose which had been counteracted by the insulin. They believe that a nervous or humoral reflex from the gastrointestinal wall conditions the latter phenomenon, since it does not appear after subcutaneous injection of the sugar.

Medizinische Klinik, Berlin

23: 195-232 (Feb. 11) 1927

Equilibrium and Its Disturbances. P. Schilder.—p. 195.
Symposium on Treatment of Hyperthyroidism. O. Porges, et al.—p. 200. C'cn.
Intravenous Injection of Camphor and Strophantin. K. Fahrenkamp.—p. 201.
*Diagnosis of Activity of Tuberculosis. E. Szász.—p. 203.
Psychogenic Spastic Ileus. R. Köster.—p. 205.
Etiology of Ruptures of the Uterus. E. Morvay.—p. 206.
Autochthonous Sinus Thrombosis. S. Kalischer.—p. 208.
*Pathology of Trichinosis. F. Pavlica.—p. 209. C'cn.
*Anaphylaxis to Insulin. J. Engelberg.—p. 212.
"Physiology of the Pronunciation of Sibilants." E. Reichenbach.—p. 212.
Reply. E. Fröschels.—p. 213.
Hohn's Modification of the Meinicke Reaction. E. Schereschewsky.—p. 214.
Practical Obstetrics. H. Kritzler-Kosch.—p. 215.
Charcoal in Chronic Dysentery. Weiss.—p. 216.
Medical Expert Testimony. Von Schnizer.—p. 217.
Recent Results in Surgery. Kroll.—p. 218.

Diagnosis of Activity of Tuberculosis.—Szász believes that a very pronounced Pirquet reaction speaks for active tuberculosis—even in adults.

Pathology of Trichinosis.—Pavlica describes a small epidemic of trichinosis (nine patients with three deaths). Eosinophilic myocarditis was one of the interesting histologic changes. Eosinophils were not found in the blood in a fatal case, but the eosinophilia was marked in convalescents.

Anaphylaxis to Insulin.—Engelberg's patient presented all the signs of an anaphylactic shock after an injection of insulin. He overcame her hypersensitiveness on the next occasion by injecting a small amount (0.1 cc.) first and the rest (0.9 cc.) after fifteen minutes.

Monatsschrift für Geb. und Gynäkologie, Berlin

75: 323-462 (Jan.) 1927

The Normal Changes and Toxicoses of Pregnancy. L. Seitz.—p. 323.
Diabetes Insipidus and Pregnancy. E. Klaften.—p. 333.
Causes and Treatment of Brow Presentation. H. Högler.—p. 349.
Spasms of the Birth Passage During Labor. K. Fink.—p. 365.
*Pain Caused by Freely Suspended Uterus. H. Sellheim.—p. 368.
Salpingography After Alexander-Adams' Operation. J. Rosenblatt.—p. 382.
Treatment of Prolapse. W. Benthin.—p. 384.
Early Stages of Hydatid Mole. J. Dörffel.—p. 391.
*Congenital Syphilis. S. A. Gammeltoft.—p. 400.
Prevention and Suture of Perineal Lacerations. E. Martin.—p. 414.

Chronic Pain in Women.—Sellheim discusses chronic back or abdominal pain in women for which no cause can be found. It is brought on most often by change of position (from recumbent to upright) or by work involving increase of intra-abdominal pressure. It frequently dates from a childbirth, particularly a first childbirth late in life. He ascribes it to increased mobility of the uterus, the result of lack of support by a weakened pelvic floor. The pain is caused by dragging on the ligamental apparatus by which the uterus is suspended, and can be cured by a suitable plastic operation on the pelvic floor.

Congenital Syphilis.—In the vast majority of cases of congenital syphilis, the infection is transmitted by way of the placenta. Infection before the fourth or fifth month is improbable. Of 194 children born to syphilitic women who had never received treatment, only seven were free from syphilis. The period of observation was at least six months. The situation was improved, though still bad, in women who had received treatment before pregnancy. Treatment during pregnancy gave better results, arsphenamine much better than mercury: seventy-nine healthy children were born to ninety-eight women treated with arsphenamine during the pregnancy. Thorough treatment both before and during pregnancy yielded the best results. The fact that the disease was of long standing in the mother was not found to be any protection to the child, nor does the birth of a healthy child assure that future children will be free of infection. In Gammeltoft's clinic a child is not treated unless syphilis has been diagnosed with certainty. Prophylactic treatment confuses the healthy with the infected, which he considers a grave injustice to the latter. In uncertain cases, the child is kept under observation for six months. The mother is encouraged to suckle the child in all cases except when the infection took place late in pregnancy. An account is given of the Welander Homes for syphilitic children.

Münchener medizinische Wochenschrift, Munich

74: 95-134 (Jan. 21) 1927

*Polyamyloses in Diabetes. H. von Hoesslin and H. Pringsheim.—p. 95.
*Paramorbillous Encephalitis. F. Lust.—p. 96.
Urinary Diastase in Diseases of the Pancreas. R. Janker.—p. 101.
Isthmic Motility Early in Pregnancy. W. Hole.—p. 103.
Treatment of Gastric Ulcer. G. Tillmann.—p. 106.
Parenteral Injections of Guaiacol. Basch.—p. 108.
Hot Air Treatment of Gonorrhea in Women. H. Fieser.—p. 109.
Diabetes and Avitaminosis. P. Ziegelroth.—p. 111.
An Unusual Suicide. E. Wittermann.—p. 112.
Internal Treatment of Cholelithiasis. A. Krecke.—p. 113.
German and American Dentistry. E. Knoche.—p. 115.
Disease and Validity of Marriage. Schiedermair.—p. 116.

Polyamyloses in Diabetes.—Hoesslin and Pringsheim tested a mixture of polysaccharides obtained by fermentation of starch by *Bacillus macerans*. The preparation was well tolerated by the majority of diabetic patients.

Paramorbillous Encephalitis.—In the last few months Lust has seen four cases of encephalitis (one complicated by poliomyelitis) in children who had measles. Recovery was complete in only one case.

Wiener klinische Wochenschrift, Vienna

40: 213-244 (Feb. 17) 1927

The Interrenal System and Hermaphrodism. E. Schwarz.—p. 213. C'td.
*Cyanotic Spots in Necrosis of the Pancreas. P. Walzel.—p. 218.
Indications for Diathermy and Electrocoagulation. G. Nobl and O. Glassberg.—p. 220.
Idiomuscular Contractions in Neuroses. E. John.—p. 222.
Idiomuscular Contraction and Lactic Acid Content of the Blood. H. Grill.—p. 224.
Clinical Picture of Idiomuscular Contraction. V. Kollert.—p. 224.
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Abuses of Pharmacotherapy. R. Wasicky. Supplement. 1-8.

Cyanotic Spots in Necrosis of the Pancreas.—In one of his six cases of acute necrosis of the pancreas Walzel observed the cyanosis that was first pointed out by Halsted. The cyanosis was lattice-like in shape and was noticed immediately after the operation. It lasted until the patient died.

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Regulation of Blood Calcium in the Human Organism. G. Hetényi and A. von Gaál.—p. 841.
Refractometric Determination of Fibrinogen. S. Somogyi.—p. 851.
Transmission to the Rabbit of Hypersensitiveness of the Human Skin. E. Lehner and E. Rajka.—p. 855.
Pathology of Blood Serum. J. M. Goldberg.—p. 867.
*Experimental Hyperglycemia in Fever. H. Cohn.—p. 878.

Blood Volume and Increase in Blood Pressure.—Of Hartwich and May's seventeen cases of different types of kidney diseases, only five presented blood volumes in normal proportion to the body weight. In the rest of the patients the blood volumes were considerably increased. In five cases the increase was caused by augmentation of the blood plasma, in six cases both the plasma and the volume of the blood corpuscles were increased. Chronic nephritis characterized by severe renal insufficiency usually belongs to the first type. Of twelve cases of essential hypertonia five presented normal, the others increased blood volumes. The erythrocytes were usually enlarged in hypertonia. In chronic nephritis, essential hypertonia and malignant sclerosis the blood volume was diminished by a salt-free diet.

Experimental Hyperglycemia in Fever.—The blood sugar curve of the organism did not rise after peroral administration of dextrose, in Cohn's experiments on febrile human beings and animals. The metabolism is increased in fever, and the carbohydrates decomposed more rapidly than in normal conditions.

Zentralblatt für innere Medizin, Leipzig

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Survey of Rhinolaryngology. O. Seifert.—p. 202.

48: 233-264 (Feb. 26) 1927

This issue is devoted to the proceedings of the Society for Internal Medicine of Northwest Germany.

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*Action of Cocci on Formation of Diphtheria Toxins in Blood Serum. N. Gryaznoff and S. Sherishorina.—p. 263.
Influence of Arsenic on Blood Ferments. I. Parfentyeff.—p. 269.

Influence of Staphylococcus and Streptococcus on Formation of Diphtheria Toxin in Blood Serum.—Blood serum served as the medium in Gryaznoff and Sherishorina's researches. First they cultivated staphylococci; a day later, diphtheria bacilli. It appeared that the staphylococcus causes changes in the albumin in the serum, favoring growth of the diphtheria bacilli. The formation of diphtheria toxin was more rapid and its toxicity more intense than is the case when mere serum is used. The toxin was readily destroyed, owing to the proteolytic property of the staphylococcus. The toxin-producing property of the serum was less pronounced when the streptococcus was used in the place of the staphylococcus.

Acta Chirurgica Scandinavica, Stockholm

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Surgical Treatment of Exophthalmic Goiter. N. H. Brodersen and H. F. Harbitz.—p. 107.
Dilatation of the Esophagus from Tuberculous Stenosis of the Cardia. A. Lundgren.—p. 172.
*Collateral Circulation in the Renal Capsule. S. Johansson.—p. 181. In English.
*Treatment of Ischemic Contraction of Muscles. S. Johansson.—p. 188. In English.
Two Cases of Tumor of the Renal Capsule. S. Johansson.—p. 197. In English.
*Torsion of Appendices Epiploicae as a Cause of Disease. S. Johansson.—p. 205. In English.
Volvulus of the Sigmoid. B. Fernström.—p. 213. In English.
Operative Treatment of Cancer of the Colon. E. Perman.—p. 257. In English.

Collateral Circulation in the Renal Capsule.—In operating on a case of chronic pyelonephritis, Johansson was surprised to find the kidney lying inside its own capsule as a kind of sequestrum. The hilus vessels were completely obliterated. The vascular system of the capsule, on the other hand, was found to be highly developed and to have sent branches across into the cortex. By means of this collateral circulation the kidney had been enabled to continue its function.

Treatment of Ischemic Contracture of Muscles.—Johansson reports good results in three difficult cases on which he operated three or more years ago. His method consists in careful separation of all the flexor muscles and plastic elongation of their tendons.

Torsion of Appendices Epiploicae.—A woman, aged 39, had had attacks of pain in the lower abdomen for fifteen years. The pains were mostly in the right side and radiated upward. Chills and vomiting were absent. She was operated on under the probable diagnosis of torsion of an ovarian cyst. On the sigmoid flexure an appendix epiploica was found, the pedicle of which had undergone complete torsion. Nineteen cases from the literature are reviewed.

Hospitalstidende, Copenhagen

70: 97-120 (Feb. 3) 1927

*Antisyphilitic Treatment During Pregnancy. A. Kristjansen.—p. 97.
Embryonic and Tumor Cells. A. Fischer.—p. 109.
Roentgen Rays and Antirachitic Factor of Cod Liver Oil. E. Rekling.—p. 116.

Antisyphilitic Treatment During Pregnancy.—Kristjansen's results are based on 118 cases. The age of the patients ranged from 16 to 39 years. The total dose of neoarsphenamine given varied between 4 and 5 Gm. One hundred and twelve infants were born in an apparently healthy condition. Nine died during the first half year of life. Of the remaining the oldest is now over 5 years of age. Not one has presented syphilitic symptoms or a positive Wassermann reaction.